



**M · M · B · L**  
MATH MAJOR BE LIKE

**MAÚGNAYING TALÁSÁLITAANG PANG-AGHÁM**  
*INTEGRATED SCIENCE VOCABULARY*  
**Inglés-Pilipino**  
*English-Pilipino*

**LINANGAN NG WIKANG PILIPINO**  
Itinatág sa Tangkilik ng UNESCO

hangò mulâ sa  
**LUPON SA AGHÁM**  
Ikalawáng Hipnô  
Taóng 1969

galing sa múlaang akdâ ni  
**GONSALO DEL ROSARIO**  
Patnugot

siping minulinyós ni  
**Benrie "TRENT" Palma Buco**  
Tagápangasiwà sa MMBL

# P Á U N A N G S A L I T Â

- Sa mgá gurong magtuturò ng aghám sa mgá batang Pilipino sa pamámagitan ng wikang Pilipino—at sa mgá magháhandâ ng mgá kákailangáning aklát-aralán;
- Sa mgá Pilipinong nagpápakádalúbhasà sa wikang Inglés, upang matulúngan siláng maúnawaan ang kahulugán ng mahihírap at “malalálím” na salítang Inglés sa aghám;
- Sa mgá Pilipinong nagpápakádalúbhasà sa wikang Pilipino, upang matutúhan nilá ang mgá maúgnaying katawagáng pang-aghám; at
- Sa laháat ng Pilipinong paláarál, paláisíp at hindî natátakot sa mgá makábagong kaisipán.

Ang Talásálitaang itó ay isáng maúgnaying kaayusán; bawa’t tawag ay hindî nagsasarilí sa anyô, kahulugán, diwà at bigkás kundî maúgnaying bahagi ng iláng “magkákamág-ának” na salitâ.

Hindí itó aklát para sa baguhán. Itó’y aklát na sánggunián at sálíksikán ng mgá gurò, mánunulát, máng-aaghám, manáanalíksík at dalúbhasà sa paggamit, pagpápaunlád at pagpápaláganap ng wikang Pilipino.

Bagamá’t ang aklát na itó ay hindî ngâ inilaán para sa balaná, ipagpápasalámat ng Lupon sa Aghám kung ang madlá ay makatagpô ng pakinábang sa ihináhandóg na katawagáng pang-aghám.

Kung ang mámbabása ay makatagpô ng isáng tawag na sa bigláng malas ay kakatwâ o hindî tumpák, bago pintasán o itúring na malí ay isaálang-álang muna sana niyá ang pagkákaugnáy ng nasábing tawag sa ibáng katawagán na may kahawíg na anyô, kahulugán, diwà at bigkás.

Gamítin ang mgá kaukuláng anyúan sa bahaging hulihán ng aklát na itó kung may nais kayóng imúngkahi.

# TALÁLAMANAN

<b>1. MGÁ PALIWÁNAG</b>	<b>4</b>
Maligayang Bati . . . . .	5
Liham sa UNESCO . . . . .	6
Umaasa ang Bayan sa Lupon sa Aghám . . . . .	7
Kasaysayan ng Lupon sa Aghám . . . . .	9
Taláániban ng Lupon sa Aghám . . . . .	11
Maúgnaying Talásálitaan sa Pagtuturò ng Aghám . . . . .	15
Susi ng mgá Batà sa Maúgnaying Talásálitaang Pang-Aghám . . . . .	25
Mgá Batayán at Alituntunin sa Paghahandâ ng Maúgnaying Talásálitaang Pang-Aghám . . . . .	28
Ang mgá Aghímuing Panambál . . . . .	30
Ang mgá Panlaping Madalás Gamitin . . . . .	33
Mgá Daglát sa Bahaging Pilipino . . . . .	35
Mgá Daglát sa Bahaging Inglés . . . . .	37
<b>2. SIPNAYAN</b>	<b>38</b>
Lahatáng Sipnayang Katawagán . . . . .	39
Palátangkasan . . . . .	43
Bilnuran . . . . .	45
Sukgisan . . . . .	49
Pánandaan . . . . .	54
Tatsíhaan . . . . .	59
Táyahan . . . . .	62
Paláúlatan . . . . .	65
Palátumbasan . . . . .	70
Mgá Ísahin ng Sukat at Sukod . . . . .	72
Mgá Sipnayang Panandâ . . . . .	73
Ang Abakadang Griyego Bilang Sipnayang Panandâ . . . . .	74
<b>3. SUGNAYAN</b>	<b>75</b>
Lahatáng Sugnayang Katawagán . . . . .	76
Tígilan . . . . .	78
Ísigan . . . . .	80
Ínitan . . . . .	82
Túnugan . . . . .	84
Súgaan . . . . .	88
Balnian . . . . .	92
Dágitbán . . . . .	94
Dágisikán . . . . .	97
Búturán . . . . .	99
Mgá Ísahin ng Sukat at Sukod . . . . .	102

Mahahalgáng Sugnayaning Lágiin . . . . .	104
Dalúbtáalan . . . . .	105
Dalúbdútaan . . . . .	109
Sigmuan . . . . .	113
Agbarugan . . . . .	119
<b>4. KAPNAYAN</b>	<b>120</b>
Lahatáng Kapnayaning Katawagán . . . . .	121
Kapnayaning Kayarián . . . . .	128
Súriing Kapnayan . . . . .	132
Haying Kapnayan . . . . .	135
Dagikapnayan . . . . .	137
Búturaning Kapnayan . . . . .	139
Mgá Batás, Símulain at Hunà . . . . .	141
Kálalangíng Kapnayan . . . . .	142
Ang mgá Mulangkáp . . . . .	145
Mgá Lárawaníng Katawagán at Kangalanán ng mgá Kapnaying Sangkáp . . . . .	148
Mgá Panambál para sa Kapnayaning Kangalanán . . . . .	149
Dagipik at Mulipon ng mgá Balangkáp . . . . .	150
Kangalanán ng mgá Dîhaying Balangkáp . . . . .	152
Kangalanán ng mgá Haying Balangkáp . . . . .	155
<b>5. HAYNAYAN</b>	<b>158</b>
Lahatáng Haynayaning Katawagán . . . . .	159
Palásíhayan . . . . .	166
Dalúbhalmanan . . . . .	168
Dalúbháyupan . . . . .	173
Háykapnayan . . . . .	189
Háysugnayan . . . . .	190
Haynayaning Gamit sa Pánaliksikán . . . . .	192
<b>6. ULNAYAN</b>	<b>195</b>
Dalúb-Ulnungan . . . . .	196
Kasaysayan . . . . .	202
Dalúbtáuhan . . . . .	206
Dalúbláhian . . . . .	208
Ágimatan . . . . .	210
Dalúbbátasan . . . . .	217
Dalúbbanwahan . . . . .	222
Pánulatan . . . . .	228
Dalúbwíkaan . . . . .	237
Dalúb-Ísipan . . . . .	240
<b>7. BATNAYAN</b>	<b>246</b>
Ang mgá Kahatián ng Batnayan . . . . .	247
Matwiran . . . . .	249
Paláásalan . . . . .	261
Palásantingan . . . . .	264
Batháalan . . . . .	267

# 1

## MGÁ PALIWÁNAG

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Maligayang Bati . . . . .	5
Liham sa UNESCO . . . . .	6
Umaasa ang Bayan sa Lupon sa Aghám . . . . .	7
Kasaysayan ng Lupon sa Aghám . . . . .	9
Taláániban ng Lupon sa Aghám . . . . .	11
Maúgnaying Talásálitaan sa Pagtuturò ng Aghám . . . . .	15
Susì ng mgá Batà sa Maúgnaying Talásálitaang Pang-Aghám . . . . .	25
Mgá Batayán at Alituntunin sa Paghahandâ ng Maúgnaying Talásálitaang Pang-Aghám . . . . .	28
Ang mgá Aghímuing Panambál . . . . .	30
Ang mgá Panlaping Madalás Gamitin . . . . .	33
Mgá Daglát sa Bahaging Pilipino . . . . .	35
Mgá Daglát sa Bahaging Inglés . . . . .	37

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# MALIGAYANG BATI

**Republika ng Pilipinas**  
**PAMBANSÁNG PATNUGUTAN SA PÁUNLARANG-AGHÁM**  
 (National Science Development Board)  
*Maynila*

Lihim kong sinubáybayán ang mgá gawáin ng Lupon sa Aghám. Nakatútuwáng pagmasdán ang isáng pangkát ng mgá dalúb-aghám na mati-yagáng nág-áral ng kung paáno lálapatan ng tumpák na salítang-aghám sa Pilipino ang mgá salítang-aghám sa Inglés. Akó ay naníniwalà na darating din ang panahón na kapág ang wikang katutubò ang igigiít na iturò sa mgá mág-aarál, ang laháat ng laráingan ng aghám ay mabilís na maúunawaan at matagál na pakíkinabangan ang mgá natutúhan. Itó ay batay sa karanasán ng Bansáng Hapón na sa wikang Niponggo itinúturò ang aghám doón. Pinátutunayan ng mgá ulat dito sa atin na sa pulutóng ng 100 batang magsimulâ sa unang baitáng sa primárya, humigít-kumúlang lamang sa 40 ang nakararatíng sa mataás na páaralán o “high school,” at ang 60 ay hindi nagpapatuloy at napípilitan nang maghánapbúhay sa anumáng kapáaraan o pagkakátaóng matagpuán. Kung siláng tinatáwag na mgá “drop-outs” o tumígil sa pág-aáral ay nakaúunawà sa mgá katawagán at kahulugán ng aghám, katúlud ng mgá batang Hapón na kasínggulang nilá, silá man ay matutúlud din nitóng hulí na nakúkuhang mgá katúlong sa págawaan ng radyo, TV, auto, atb., lalò sa kalaláng o indústriya. Hindi ko namán masísisi ang sínuman sa mgá pinunò sa ating Kágawarán ng Págtuturò at talagá namáng salát na salát ang ating napápakinabángang mgá salitâ o katawagán sa aghám. Paáno ngâ namán maitúturò sa wikang pambansâ kung gayón?

Salámat na lamang at may mgá nagmámala-sakit na gumágawà ng kusang-loób na hakbáng upang malunásan ang súliranín. Ang mgá kaanib ng Lupon sa Aghám ay maiháhanay sa mgá bayáni bagamán ang kabáyanihang itinátampók nilá ay sa isáng larángang hindi pángkaraníwan. Nakahandáng ipailálim ang kapakanáng pansárlili sa kagalíngan sa Wikà at ng Bayan, ang mgá kaánib

ng Lupon at ang kaniláng mgá tagátaguyod at kapánalig ay gumágawà at naglilingkod nang waláng pasubali. Tahímik at tungó ang ulo sa paggawà upang makapág-abúloy sa ikaúunlad ng Aghám at Wikà. Anóng pambihírang kabáyanihan! Mgá matatapát na lingkúdbayan na hindi naghíhintay ng katanyagán o pabúyang waláng kabuluhán kung iháhambing sa kaluwáihatian ng sángkatáuhan. Nawá’y manátili siláng tinátanglawán ng kalínga at biyayà ng Máykapál, magíng mata-tág silá sa panínindigan at magtaglay silá ng kalúsugang hindi magágapì ng kasawíang-palad na pagnanáis na mahandugán ang bayan ng mabísang paglilingkód.

**(Lgd.) JUAN SALCEDO, JR.**  
 Tagápangulo

TUNAY NA SIPÌ

# LIHAM SA UNESCO

## LINANGAN (AKADEMYA) NG WIKANG PILIPINO *Itinatág sa Tangkilik ng UNESCO*

1580 Abenida Taft

Maynila, Pilipinas  
January 20, 1967

### The Executive Committee

UNESCO NATIONAL COMMISSION OF THE PHILIPPINES  
1580 Taft Avenue, Manila

Sirs:

I have the honor to indorse herewith the request of our Committee on Science (Lupon sa Aghám) for the sum of P1,500.00 for the mimeographing of the pre-publication edition of their "English-Pilipino Integrated Science Vocabulary."

The pre-publication edition of the Vocabulary will consist of about 200 mimeographed letter-size pages containing about 6000 terms in all the principal fields of science and technology.

The Committee on Science was created by the **Akademya ng Wikang Pilipino** on May 24, 1964 and it undertook the science vocabulary project in Pilipino in line with the following UNESCO policies:

- 1 "Member nations of UNESCO are invited to work on the preparation of scientific bibliographies and the standardization of terminology in their national languages." (*Paragraph 2.131 of the 12C Resolutions*)
- 2 "Resolved, to endorse Working Paper No. 4BC/NS/WP/7 ... proposing a scientific documentation and information project in the Philippine National Language." (*Resolution No. 4 of the Commission on Natural Sciences, 4th UNESCO Philippines Biennial Conference, 1963. Copy attached.*)

Your records will show that the **Akademya** itself was established in the early part of 1964 as a result

of the above UNESCO policies.

For more detailed explanations on the guiding principles and objectives of this project, we refer you to the paper "An Easier Method of Teaching Science" written by Mr. Gonsalo del Rosario, Member of the **Akademya** and chairman of the Research Subcommittee of the Lupon sa Aghám. This paper appeared in the June-July 1966 issue of your "UNESCO PHILIPPINES." (*Copy attached*).

With our Committee on Science, I believe that an English-Pilipino technical vocabulary such as they have prepared will help considerably in the teaching of science to elementary school children; furthermore, the vocabulary will also be of great help to Filipinos learning science in English because the Pilipino term, being often descriptive, will give them greater insight into English scientific and technical words. We, therefore, recommend approval of their request.

Very truly yours,

(Sgd.) Jose Villa Panganiban  
**JOSE VILLA PANGANIBAN**  
President, Akademya ng Wikang Pilipino

Encls.  
A TRUE COPY

## UMAASA ANG BAYAN SA LUPON SA AGHÂM

ni Geronima T. Pecson

*Dating Tagápangulo, Pambansáng Kabáhalaan ng UNESCO sa Pilipinas  
(Talúmpating binigkás ni Gng. Pecson sa pagtátalagá sa pámunuán ng  
Lupon sa Aghám sa Bulwágang-Aghám ng NSDB noóng 12 Pebrero 1965)*

Palasák ang kasabiháng pág may ipinunlâ ay may áanihin. Kapág ang isáng tao ay nagtaním ng anumáng binhî, natútuwâ siyá kung nakíkita niyáng yaón ay tumútubò, lumálaki at nagkákasangá. Masigásig niyáng ináalagaan itó at kung sakáling sapítin ng sakunâ, gaya ng bagyó o bahâ, o siláin kayâ ng hayop na mapanirâ at mapamín-salâ, ay ginágawâ niyá ang lahát upang makatawíd sa pangánib: binábakuran, pinatútubigan at nilálagyán ng kailángang patabâ, nang sa gayón ay lumagô at yumábong hanggáng sa mamúnga nang sagana at mápakinabangan ng lahát. Ang halímbawang itó ay karaníwang nangyayári araw-araw sa búhay ng bawá't tao sa daigdíg.

Walâ páng anim na buwán ang nakalílipas sapúl nang ipunlâ ko ang binhî ng Linangan (Akademya) ng Wikang Pilipino sa isáng pagtítipong ginanáp sa *Manila Hotel* noóng iká-20 ng Agosto, 1964. Nakíkita ko na ngayón ang nakalúlugód na pagtubò ng aking inihásik; namúmutók na ang lupâ sa paligid at sumúsulpot na ang mumuntî nguni't luntiang mgá dahon. Hindî ko akalaing ganitó kabilís ang pagsíbol ng *Lupon sa Aghám*, nguni't sa katunáyan ay narirító tayong lahát. Hindî ninyó matátawaran ang aking kagalakan.

Ang halamang itó ay pagtútulung-tulúngan nating alagaan sapagká't ang binhî ay nápataním sa matabáng lupà, at iyón ay waláng ibá kundî kayó na bumúbuô sa *Lupon sa Aghám*. Akó namáng nagtaním, sa akalâ ba ninyó'y magpápayabâ akó? Manánatili akó sa inyóng likurán sa bawá't saglít, áalagaan ko kayó sa pagdagsâ ng unós at pagdálaw ng bagyó; sa panahón ng tuyót, bábakuran ko kayó upang malígtas sa mgá kaáway ng wikâ; ipagsásanggaláng ko kayó magíng sa iláng mgá diputádo, senadór, peryodísta at iláng mgá mámamayáng nagmámarunóng at sa halíp na makatúlong sa pagpápayabong ng ating kultúrang silanganin ay wináwasak pá nilá at pilít na pinanánatili sa diwâ ng bayan ang ísip-alipin.

Humáyo kayó at magpatúloy sa mgá gawáing makabáyan. Italagá ang saríli sa pangatawanáng pagsásagawâ ng inyóng adhikà na maisálin sa Wikang Pilipino ang lahát ng katawagáng-aghám, upang:

- 1 maúnawaang mabúti ng ating mgá batang mág-aarál ang mgá lihim at himalâ ng aghám;
- 2 maláman ng mgá táumbayan, lalò na sa ating mgá nayon, ang makábuluhán at makábagong mgá tuklâs at kaalamán tungkol sa aghám sa pamámagitan ng ating mgá pahayagáng pang-araw-araw at linggúhang mágasin; at
- 3 mulíng yumábong at yumáman ang Wikang Pilipino at maipágmalakí sa buóng sántinakpán na ang Republika ng Pilipinas ay may mayámang wikang pambansâ.

Marámi ring bansáng gaya natin ang gumágamit ng ibá't-ibáng wíkein gaya ng Indiya, Espanya, Indonésya at ibá pá. Nguni't mayroón siláng pagkakáisa at pagkakásundô sa pagtangkílik at pagpápaláganap sa isá sa kaniláng wíkein upang tanghalíng wikang pampámahalaán.

Sapagká't dito sa Pilipinas ay mayroón tayong pagkakáunawaang ibandilâ ang Wikang Pilipino, síkapin nating iyán ay lubúsang mapaunlâd at mapayábong. Talastás ng lahát na ang pagsásapilipino ng mgá salitáng-aghám ang pinakámahírap na gawáin, kayâ isinásalalay ko sa inyóng pangkát ang buô kong pagtítiwala sa maselang gawáing iyán. Mabigát na pasánin, maluwát na pagtítiyagâ at mahírap na páisipán ang inyóng tinátanggap mulâ ngayón. Magíng marubdób sana tuwína ang inyóng pagmámalásakit at huwág yaóng tinátawag nating "ningas kugon" (*Dalang na usang – Na erep a tampol balet marmarlang*).

Ang kinálabasán ng inyóng págpapagál at pág-aáral ang siyáng ináasahan ng UNESCO. Pag-butíhin ninyó ang inyóng mgá gawáin at kayó na rin, sa inyóng saríli, ang unang masísiyahán kung maisá-aklát na ang bunga ng inyóng págpapagód. Iyán ang pinakámagalíng na pamána na inyóng maiíwan sa inyóng bayan, na magíging karángalan ninyó sampû ng inyóng pamílya, sapagká't mapápatalâ sa aklát ng ating kasásayan ang mgá pangálan ninyó na-mgá bayáni ng Wikang Pilipino.

Mabúhay kayó, mabúhay ang ating Wikà, at mabúhay ang Bansáng Pilipinas!

# KASAYSAYAN NG LUPON SA AGHÁM

ni Dr. Rogelio N. Relova

*Tagápangulo, Lupon sa Aghám; Patnugot, Lunduyang Pánaliksikán sa Pánggagamót, NSDB  
(Batay sa isáng panayám na binasa ni Dr. Relova  
sa Dalúbhasaáng Normál ng Pilipinas noóng Hunyo 21, 1968)*

Noóng iká-18 ng Marso ng taóng 1964 ay tumanggáp akó ng isáng liham na galing sa tanggapan ng UNESCO sa Pilipinas na nagbabalitang akó raw ay nahirang na isá sa mgá Kalinang (kaanib) ng Linangan (Akademya) ng Wikang Pilipino na bagong katatatag sa punyagí ni Gng. Geromina T. Pecson, tagápangulo noón ng UNESCO National Commission of the Philippines.

Ang págkahirang sa akin ay utang marahil sa pangyayaring nakasulat akó ng iláng tulâ at lathalaín sa Pilipino at akó noón ang namumunò sa *Lupon sa Wikà* ng mgá kawaní ng NSDB. Mgá iláng buwán na noóng kamí ay naghahandà ng mgá pamagát na Pilipino sa ibá't ibáng pangkát at tanggapan ng NSDB at itó ay nakatawag pansín ng marámi.

Tinanggáp ko, di man dapat, ang karangalang magíng isáng Kalinang at magmulâ noón ay inisip ko na kung papaano akó, isáng mananaliksík sa panggagamot, ay makatutulong sa paglilingang at pagpapaunlad ng wikang Pilipino. Ang Linangan, na mulâ sa unang taón nitó ay pinanguluhan na ni Dr. Jose Villa Panganiban, patnugot ng Surián ng Wikang Pambansâ, ay tinangkilik ng *National Science Development Board* (NSDB) nang ibalitâ ko sa pamunuán nitó ang págkahirang sa akin bilang Kalinang.

Ang ibá pá sa labíng-isáng Kalinang ay siná Gng. Paraluman S. Aspillera, Agsikap Gonsalo del Rosario, Dr. Antonia F. Villanueva, Dr. Genoveva Edrosa Matute, G. Vedasto G. Suarez, G. Celso A. Carunungan, Dalúbgurong E. Arsenio Manuel, Dr. Pura Santillan Castrence at Dr. Federico B. Sebastian. Itóng hulí ay sumakabiláng-buhay kamakailán at ang ipinalít sa kanyá ay ang manunulat na Clodualdo del Mundo, kasalukuyang (1969) pangulo ng TANIW.

Sa pulong ng Linangan noóng iká-24 ng Mayo, 1964, ay ipinagpasyá na lumikhâ ng isáng *Lupon sa*

*Aghám* na siyáng mangangasiwà sa pagtitipon at pagsasacayos ng mgá salitâ at katawagáng pang-aghám sa Pilipino. Nahirang ang inyóng lingkód na tagápangulo ng nasabing Lupon sa Aghám at sa gawaing itó ay ipinagpasyáng tutulongan siyá ng Kalinang del Rosario bilang tagápangulo ng Kublupon sa Pananaliksík.

Noón pá man ay nadama ko na ang bigát ng aming pananagutan at mataman kong inisip kung paano kamí makatutugon sa gawaing iniatang sa amin.

Ang unang hakbáng na aming minarapat ay ang sumulat noóng Setyembre 10, 1964, sa lahát ng pamantasan, dalúbhasaán, kapisanan at tanggapan na may kaugnayan sa aghám at sa ag-hímuan (*technology*) at hinilíng sa mgá nasabing mgá katátagan (*institutions*) na magpadalâ sa Lupon ng kaniláng mgá kinatawán na may malasakit sa wikang Pilipino at may kasanayán sa isá man lamang sa mgá pangunahing larangan ng aghám. Lumakad ang maraming araw nguni't waláng sumagót sa aming paanyaya, dalá marahil ng hindi lubós na págkaunawà sa naiibáng layon ng Lupon sa Aghám.

Hindi kamí nasiraan ng loób. Noóng iká-9 ng Oktubre, 1964, ay nagpakalat kami ng mulí ng panibagong palibot-sulat at dito ay lalong masaliksík naming isinalaysáy ang mgá layunin at hangarin ng Lupon sa Aghám. Sa pangalawáng surat na itó ay marami ang aming natanggap na katugunan. Karamihan sa mgá katátagang sumagót ay nagbigáy sa amin ng mgá pangalan at tirahan ng mgá gurò, kaanib o kawaní nilang may kakayahán at pagnanais na umanib sa Lupon, nguni't mayroón din namáng sumagót na nagsabing walâ siláng maipadadalâ sapagká't ang mgá tauhan niláng may kaalamán sa aghám ay mgá Ilúkano o Bisaya na hindi sanáy sa wikang Pilipino. Gayunman, ang mgá nais umanib ay umabot sa bilang na siyamnapu at dalawá.

Tumawag kami ng isáng lahatáng pulong noóng iká-12 ng Pebrero, 1965, upang italagá ang Lupon sa Aghám. Nangagsidaló siná Dr. Juan Salcedo, Anák, tagápangulo ng NSDB; si Dr. Jose Villa Panganiban at si Gng. Geromina T. Pecson. Si Dr. Panganiban, sa kanyáng katungkulang pangulo ng Linangan, ang siyáng tumanggáp sa panunumpâ ng mgá kaanib ng Lupon sa Aghám.

Sa unang pulong na itó ay ipinaliwanag na agád namin na ang gawain ng Lupon sa Aghám ay kusang-loób, na waláng mahihintáy na pabuyà, na isinasabalikat itó alang-alang sa wikà at aghám.

Katulad ng mgá ibáng kilusáng pambayan, sa simulâ ay “mabuláng mabulâ na gugò” at “maningas ang kugon,” wikà ngâ ng kasabihán. Subali’t nang simulán na ang puspusang paggawâ, sa pamamagitan ng lingguhang pagpupulong ng mgá kublupon (kadalasan ay kung Biyernes ng tanghali sa silíd-pulungán ng NIST sa daáng Herran, Maynila), ay tumanggáp na akó ng iláng pagdadahilán na hindí raw silá maáring makapagpatuloy sa-pagká’t maraming ibáng kaabalahán. May mgá nangagtanóng kung magkano ang *per diem* at *allowance*. Nang walâ akóng maipangakò sa kanilá, ang mgá yaón ay nangawalâ na lamang at sukat sa mgá sumunód na pulong. Nguni’t ibá-ibá ang ugali ng tao. Sa nagsimuláng 92 ay 60 lamang ang natirá nguni’t ang mgá itó ay nagíng masiglá at masugid sa kaniláng pinanumpaáng kusang-loób na gawain.

Ang animnapung kaanib ng Lupon sa Aghám ay pinagpangkát-pangkát namin sa anim na kublupon (*subcommittee*) na tumutugon sa anim na pangunahing pangkát ng aghám: sipnayan (*mathematics*), sugnayan (*physics*), kapnayan (*chemistry*), haynayan (*biology*), ulnayan (*social sciences*), at batnayan (*philosophy*).

Bago kami magsimulâ sa mgá pangatawanáng pagtitipon at pagsasaayos ng mgá salitáng pang-aghám ay nag-anyaya muna kami ng mgá kilaláng gurò sa wikang Pilipino na gaya niná Dalúbgurong Tomas N. Aguirre ng Pamantasan ng Pilipinas, G. Macario Agawin ng Kagawarán ng Pagtuturò at G. Sinforsoso C. Cruz ng *Baguio Institute of Technology*. Si G. Aguirre ay bumasa ng panayam sa paksáng “Ang mgá Uri at Kapakanán ng Panlapi sa Wikang Pilipino Bilang Isáng Batis ng Pagpapayaman ng Wikang itó.” Si G. Agawin ay nagsalitâ sa paksáng “Ang Bisà at Tungkulin ng Panlapi sa Palá-

buuán ng Salitâ,” samantalang si G. Cruz namán ay tumalakay sa malawak na paksáng “Ating Kalinangang Minana.” Ang mgá panayam na itó ay nagíng mgá patnubay, tagubilin, payo at paalala sa amin upang mapanuto sa pagsasaayos ng mgá salitáng pang-aghám na binabalak naming gawin.

Nagíng dibdiban ang paggawâ ng Lupon sa Aghám mulâ noóng mgá unang buwán ng taóng 1965. Upang hindí masiraan ng loób o manghinawa ang mgá kalupon ay lagi ko siláng pinaaalalahanan na ang aming isinasabalikat ay gawaing makabayan na tulad ng magandáng bayánihan o “palusong” ng mgá katutubong Pilipino kung mayroón siláng mabigát at dí-pangkaraniwang gawain. Sa mgá lingguhang pagpupulong namin, ang aking laging iniisip ay kung paano mananatili ang kaniláng siglá, lalò na’t nakikinikinitá ko ang mgá daragsang pagpulâ, pagpintás at magíng pag-aglahi mulâ sa mgá waláng malasakit sa wikang pambansâ.

Noón pá mang nagsisimulâ, sinabi ko na sa kanilá na ang sasalungát sa aming mgá gawain ay yaóng mgá may gulang na, na walâ nang panahón o kakayahán, dili kayá’y tamád nang mag-aral pá ng mgá mauunlád at nababagong kaisipán. Sa ibabaw ng lahat ay lagi kong ipinagugunitâ sa kanilá na ang aming gawain ay para sa mgá batang mag-aaral ng aghám sa mababang páaralán—mgá batang ngayón ay ‘dí maturuan ng aghám dahil sa kahirapan ng mgá salitáng Inglés na hangò sa Latín at Griyego.

Ang madalás kong masabi sa kanilá ay: “Kung sakali mang maraming sasalungát ay huwág tayong masisiraan ng loób; alalahanin natin na ‘pag ang saranggola ay sinalungát ng hangin, lalò itóng magtutumaás.” At ganitó pá: “Ipagpatuloy natin ang paggawâ tulad sa patuloy na pagdaloy ng tubig sa ilog; anumán ang ihadlang sa agos ay piilit ding mag-uumapaw ang tubig.”

Ang mgá kaisipáng itó ang naging damdamin ng bawâ’t kaanib ng Lupon sa Aghám, kayá’t ang natiráng animnapung kaanib ay nanatiling matibay, masiglá at matapát hanggáng sa mgá sandalíng itó.

Matutunghayán sa kasunód na iláng pahina ang taláániban at talátátagan ng Lupon sa Aghám.

## TALÁÁNIBAN NG LUPON SA AGHÁM

### TALÁTÁTAGAN NG LUPON SA AGHÁM

- Lahatáng Tagápangulo** **Dr. Rogelio N. Relova, Kalinang**  
 – Linangan (Akademya) ng Wikang Pilipino  
 – Patnugot, Lunduyang Pánaliksikán sa Panggagamót, NIST
- Lahatáng Kalihim** **Mggl. Nicomedes G. Atienza**  
 – Lunduyang Pánaliksikán sa Haynayan, NIST  
 – Makatà at Manunulát

### KUBLUPON SA UGNAYAN

- Tagápangulo** **Dalúbgurong Virginia R. Reyes**  
 – Pamantasan ng Lunsód ng Maynila (PLM)
- Mgá Kagawad** **Mggl. Nicomedes G. Atienza**  
 – Lunduyang Pánaliksikán sa Haynayan, NIST
- Gng. Ester E. Dazon**  
 – Lunduyang Pánaliksikán sa Panggagamót, NIST
- Bb. Lourdes Biescas**  
 – Lunduyang Pánaliksikán sa Panggagamót, NIST

### KUBLUPON SA PÁNANALIKSÍK

- Tagápangulo** **Agsikap Gonsalo del Rosario, Kalinang**  
 – Linangan (Akademya) ng Wikang Pilipino  
 – Tagápangulo, Komisyón ng Wikang Pilipino ng Lunsód ng Maynila  
 – Pulí-Pangulo at Dalúbpunò sa Agsikapan, Takaran ng Pamantasang Gregorio Araneta (GAUF)
- Mgá Kagawad** **Agsikap Manuel M. Maravilla**  
 – Tagápangulo, Kublupon sa Sipnayan, Lupon sa Aghám
- Agsikap Godofredo R. Javier**  
 – Tagápangulo, Kublupon sa Sugnayan, Lupon sa Aghám
- Dalúbgurong Roberto B. Torres**  
 – Tagápangulo, Kublupon sa Kapnayan, Lupon sa Aghám
- Dalúbgurong Zenon R. Torres**  
 – Tagápangulo, Kublupon sa Haynayan, Lupon sa Aghám
- Gng. Lucila A. Salazar**  
 – Tagápangulo, Kublupon sa Ulnayan, Lupon sa Aghám

## KUBLUPON SA SIPNAYAN

- Tagápangulo** **Agsikap Manuel M. Maravilla**  
 – Sangáy ng Agháming Kasángkapan at Aghimuíng Língkuran, NIST
- Mgá Kagawad** **Dalúbgurong Virginia R. Reyes**  
 – Pamantasan ng Lunsód ng Maynila (PLM)
- Dalúbgurong Concepcion Perez-Simpelo**  
 – Pamantasan ng Dulong Silangan (FEU)
- G. Marcelino Hernandez**  
 – Mataás na Páaraláng Araullo
- Gng. Consolacion Esguerra**  
 – Pangalawáng Punung-gurò, Mataás na Páaraláng Mapa
- Gng. Manuela A. Rivas**  
 – Mataás na Páaraláng S. Osmeña, Amá
- Gng. Imelda A. Coloma**  
 – Mataás na Páaralán ng mgá Batang Lalaki, Pamantasan ng Dulong Silangan (FEU)
- G. Felipe Fernando, Anák**  
 – Mataás na Páaraláng-Aghám ng Pilipinas
- G. Avelino Cariño**  
 – Dalúbhasaán ng De la Salle (DLSC)

## KUBLUPON SA SUGNAYAN

- Tagápangulo** **Agsikap Godofredo R. Javier**  
 – Sangáy ng Agháming Kasángkapan at Aghimuíng Língkuran, NIST
- Mgá Kagawad** **Agsikap Gonsalo del Rosario**  
 – Takaran ng Pamantasang Gregorio Araneta (GAUF)
- Dalúbgurong Melecio Deauna**  
 – Dalúbhasaán ng De la Salle (DLSC)
- Dalúbgurong Restituto Villanueva (SLN)**  
 – Pamantasan ng Dulong Silangan (FEU)
- Agsikap Dominador J. Tiño**  
 – Sangáy ng Panatamán at Lahatáng Língkuran, NIST
- Agsikap Simeon de la Cruz**  
 – Pambansáng Daámbakal ng Pilipinas
- Gng. Melinda Z. Cabansag**  
 – Mataás na Páaraláng S. Osmeña, Amá
- Bb. Bella Rosa Reyes**  
 – Mataás na Páaraláng Mapa
- Gng. Emilia Q. Agustin**  
 – Sangáy ng mgá Páaraláng-Bayan sa Lunsód ng Maynila
- G. Eugenio O. Legaspi**  
 – Dalúbhasaáng Jose Rizal (JRC)

## KUBLUPON SA KAPNAYAN

- Tagápangulo** **Dalúbgurong Roberto B. Torres**  
 – Punò, Kagawarán ng Kapnayan, Dalúbhasaán ng De la Salle (DLSC)
- Mgá Kagawad** **Dalúbgurong Pablo de la Vega**  
 – Dalúbhasaán ng De la Salle (DLSC)
- G. Miguel Ampil, Mángangapnáy**  
 – Pangulo, Sánggunián ng mgá Mángangapnáy sa Pilipinas
- G. Leon G. Alejo**  
 – Lunduyang Pánaliksikán sa Pagkain at Paniyá, NIST
- G. Amador Sumabat**  
 – 1025 Washington, Sampalok, Maynila
- Dalúbgurong Concepcion B. Santos**  
 – Dalúbhasaán ng Parmasya, Pamantasan ng Santó Tomás (UST)
- G. Andres Santiago**  
 – Pambansáng Kawanihán ng Paniniyasig (NBI)
- G. Carlos N. Carreon**  
 – Sangáy sa Pagsubok at Pamantayan, NIST
- Bb. Consolacion Ruiz**  
 – Mataás na Páaraláng Manuel L. Quezon, Tundó, Maynila
- Bb. Shirley E. Nessia**  
 – Kalihim, Sánggunián ng mgá Mángangapnáy sa Pilipinas  
 – Kasunó ng Kawanihán ng mgá Minahán, Maynila

## KUBLUPON SA HAYNAYAN

- Tagápangulo** **Dalúbgurong Zenon R. Torres**  
 – Patnugot, Kagawarán ng mgá Pánaliksikán, Pamantasan ng Silangan (UE)
- Mgá Kagawad** **Dr. Rogelio N. Relova**  
 – Patnugot, Lunduyang Pánaliksikán sa Panggagamót, NIST
- G. Agustin F. Umali**  
 – Dalúb-isdâ ng Pambansáng Museo
- Dr. Gregorio T. Velasquez**  
 – Pamantasan ng Lunsód ng Maynila (PLM)
- Dalúbgurong Remedios F. Domingo**  
 – Pamantasan ng Dulong Silangan (FEU)
- G. Pedro Gonzales**  
 – Pangkát ng Dalúbhayupan, Pambansáng Museo
- Gng. Adoracion T. Arañes**  
 – Pamantasan ng Dulong Silangan (FEU)
- Bb. Lilian Alfonso**  
 – Mataás na Páaraláng Araullo
- Gng. Milagros A. Ramos**  
 – Lunduyang Pánaliksikán sa Haynayan, NIST
- Dalúbturong Anselmo Cabigan**  
 – Takaran ng Pamantasang Gregorio Araneta (GAUF)

## KUBLUPON SA ULNAYAN

- Tagápangulo** **Gng. Lucila A. Salazar**  
 – Pambansáng Museo at  
 – Pamantasan ng Silangan (UE)
- Mgá Kagawad** **Dalúbgurong Dionisio Salazar**  
 – Manunulát sa Pilipino at Inglés  
 – Pamantasan ng Silangan (UE)
- Gng. Soledad Antiola**  
 – Sangáy ng Paghahanáp ng Talihilig sa Aghám, NSDB
- G. Nicomedes G. Atienza**  
 – Lunduyang Pánaliksikán sa Haynayan, NIST
- G. Artemio R. Vitancol**  
 – Sangáy sa Pábatirang Pangkalúsugan at Paturuán, Kagawarán ng Kalúsugan
- Bb. Pacífica H. Cordero**  
 – Kawanihán ng Pamantayan sa Paggawâ, Kagawarán sa Paggawâ
- Gng. Marvel G. Ruiz**  
 – Kawanihán ng Pamantayan sa Paggawâ, Kagawarán sa Paggawâ
- Mggl. Rosendo N. Feleo**  
 – Kapisanang “Bayan Muna,” Tundó, Maynila
- G. Jose M. Villena**  
 – Pangkát sa Tauhan, NIST
- Bb. Fe Alday**  
 – Sangáy ng Paghahanáp ng Talihilig sa Aghám, NSDB

## KUBLUPON SA BATNAYAN

- Tagápangulo** **Dalúbgurong Conrado R. Reyes**  
 – Pamantasan ng Santo Tomás (UST)  
 – Dalúbhasaán ng San Beda (SBC)
- Mgá Kagawad** **Dalúbgurong Lydia R. Almoro**  
 – Pamantasan ng Dulong Silangan (FEU)
- Dalúbgurong Moises Simbulan**  
 – Pambansáng Dalúbhasaán ng Gurò (NTC)
- Dalúbgurong G. Sta. Ana**  
 – DALMAPIL
- Dalúbgurong Eugenia Tayao**  
 – Pamantasan ng Lunsód ng Maynila (PLM)
- Dalúbgurong Fermina K. Soriano**  
 – Dalúbhasaán ng Kalakal sa Pilipinas (PCC)
- Dalúbgurong Guadalupe B. Estrada**  
 – Dalúbhasaán ng Kalakal sa Pilipinas (PCC)
- G. Juan Si. Deborde**  
 – Takaran ng Pamantasang Gregorio Araneta (GAUF)
- Bb. Lydia Gonzales**  
 – Pamantasan ng Pilipinas (UP)

# MAÚGNAYING TALÁSÁLITAAN SA PAGTUTURÒ NG AGHÁM

ni Gonsalo del Rosario

Tagápangulo, Kublupon sa Pánanalíksík, LUPON SA AGHÁM

## ANÓ ANG MAÚGNAYING TALÁSÁLITAANG PILIPINO?

Itó ay katipunán ng mgá salítang pangkaalamán at pang-aghám na batay o hangò sa mgá salítang-ugát ng Tagalog, Bisayà, Bikol, Ilúko, Pánggasinán, Kapámpangan, Maranáw, Tausúg at ibá páng wíkain sa Pilipinas, at magíng ng ibáng wikà sa daigdíg.

Sa maúgnaying talásálitaang Pilipino, ang mgá katutubong salítang-ugát ay kaangkóp sa bigkás ng isá't isá at ng mgá salítang-ugát na hiram sa Inglés, Kastila, Malay, Insík, Sanskrito at ibá páng dayúhang wikà, at sama-sama siláng pinághangúan ng mgá maúgnaying katawagáng pang-aghám sagitan ng ating saríling panlapi, panambál at palábuuan ng mgá salitâ.

Hindí "dalísay" ang maúgnaying talásálitaang Pilipino sapagká't tumátanggáp ng mgá salítang-ugát ng Inglés, Kastila at ibá páng wikang dayúhan.

Hindí rin haluán ang maúgnaying talásálitaang Pilipino na túlad ng wikang-lansárgan na ipinangálgándakan ng iláng babásahíng may mabábang pámantayan.

Ang "wikang dalísay," kung mayroón ngâ nitó, at ang wikang haluán ay kapwà linsíl na anyô ng wikà na hindí mabisà sa pagtuturò ng kaalamán. Nasa pagitan nilá ang maúgnaying wikà, na nakasalálay sa Balarilà ng Wikang Pambansâ.

Tánging sagitan ng maúgnaying talásálitaang Pilipino maitúturò nang mabisà ang túnay na aghám sa mgá batang Pilipino sa mabábang páralán. Para sa pagtutúrong iyán, daíg ng maúgnaying talásálitaang Pilipino ang dímaúgnaying talásálitaang Inglés.

Ang maúgnaying talásálitaang Pilipino ay isáng **panimuláng talásálitaang panturò** (*initial teaching vocabulary*). Itó ay inihandâ para sa mgá gurong nagtuturò ng aghám sa mgá batang Pilipino. Lálong mabúti kung itó ay kagigilíwang gamítin ng

madlá sa hináharáp, nguni't sa ngayón ay sapát náng itúring itó na isáng panimuláng talásálitaang pampáralán, higit sa anupamán. Kailángan ang ganitóng panimuláng talásálitaang panturò sapagká't hanggáng ngayón ay bigô ang pagtuturò ng aghám sa mgá batang Pilipino.

**BIGÔ SA LOÓB NG 358 TAÓN** Mabábahagì sa tatlong panahón ang pagtuturò ng aghám sa Pilipinas.

Sa unang panahón, mulâ sa págkatatág ng Pámantasan ng Santó Tomás noóng taóng 1611 hanggáng sa pagkasúlat ni Rizal sa *El Filibusterismo* noóng 1887 – panahóng maitúuring na yugtô ng pagtuturò ng aghám sagitan ng wikang Kastila – ay walâ kahit isáng aghámanon (*scientist*) na lumitáw sa bayang Pilipino. Pinatúunayan ni Rizal sa *Fili* (salin ni P. Mariano) na:

"...hanggáng sa ngayón ay hindí pá sumísipót ang isáng kahi't muntî man lamang na *Lavoisier*, isáng *Secchi*, ni isáng *Tyndall*, sa lahing *Malayong Pilipino*."

Bigô ang aghám sa buóng yugtóng itó na tumagál ng 276 taón.

Sa ikalawáng panahón, mulâ noóng 1887 hanggáng 1901, ay hindí kataká-taká kung walâ ring sumíbol na aghámanon. Itó ang yugtô ng madugóng himagsikan at pakikídigmâ. Nabuhos ang buóng lakás at talíno ng magigíting na Pilipino sa pagtatanggól sa bayan.

Sa ikatlong panahón, mulâ noóng 1901 hanggáng sa kasálukuyan, ay umiral ang pagtuturò ng aghám sa mgá Pilipino sagitan ng wikang Inglés. Nagíng mabisà kayâ at mabunga ang yugtóng itó? Gamítin natin ang mataás at malínis na sukatán ng Gantímpalang Nobél sa mgá larangan ng sugnayan (*physics*), kapnayan (*chemistry*) at pánggagamót (*medicine*). Sa loób ng 68 taón mulâ noóng 1901 ay kuláng-kuláng sa tatlong daáng

aghámanon sa tatlong larangang nabanggít, mula sa lahat ng sulok ng daigdig, ang nagawaran ng Gantimpalang Nobél, nguni't kahit isa man lamang ay walá buhat sa Pilipinas. Bigô rin, samakatwid, ang paggamit ng wikang Inglés sa pagtuturo ng aghám sa mgá Pilipino.

Tayo ay natambád sa aghám ng Kanluran sa loób ng dí-kukulangin sa 358 taón nguni't "waláng nangyári." Ang bansáng Hapón ay natambád sa kanluraning aghám mula noóng taóng 1868 lamang, nang buksán ng Emperador Meiji ang kanyáng bansá sa kabihasnán ng Kanluran. Sa loób lamang ng isáng daáng taón ay nakapagtayô na ng isáng makapangyarihang kabihasnáng aghimuin (*technical*) ang mgá Hapón, at maramí-ramí na rin ang mgá aghámanong Hapón na nagkamít ng Gantimpalang Nobél. Anó ang kaibhán?

**SANHĪ NG KABIGÚAN** Dito sa Pilipinas, ang batà sa mabábang páaralán ay hindi maturuan ng tum-pák na aghám sapagká't pinipilit na sa wikang dayúhan iturò itó. Hindi ganáp na maúnawaan ng batà ang mgá salítang tulad ng *arthropoda*, *thermodynamics* at *oxidation* sapagká't hindi silá nagsásalitá ng mgá patáy na wikang Latín at Griyego. Dahil dito ay hindi nasasamantalá ang kagulangán (7 hanggang 12) na hutukin pá at madalíng tumanggáp ng kaalamán ang utak ng mgá batà. Ang tunay na aghám ay ipinagpápalíban hang-gáng sa mataás na páaralán o sa dalúbhasaán.

Nguni't mgá 80 bahagdán ng mag-aarál sa mabábang páaralán ang nagtítigil pagkatapos ng ikáanim na baitáng. At sa dalawampung bahagdán na sumásampá sa mataás na páaralán ay halos kalahati ang hindi natatapos. Samakatwid ay halos 90 bahagdán ng mgá Pilipino ang lumalakíng mangmáng sa aghám. Sa liwánag ng ganyáng pangyayári ay paáno natin mahihintáy na magkaroón tayo ng maráming lináng na kabatáan na maáring magíng aghámanon?

Doón sa bansáng Hapón, ang tunay na aghám ay itinuturò sa mabábang páaralán sagitan ng mgá salítang nakaugnáy at nakakabit sa wikang ginagamit sa táhanan sa araw-araw.

Hindi kinákailangan na ang mgá batà ay ma-kaunawa ng mahihiwagang salitá, panlapi at panambál ng patáy na mgá wikang Latín at Griyego.

Kayá't halos ang buóng bayang Hapón ay gising at mulát sa aghám. Nakapagtátaká bá kung sa-gana silá sa aghámanon?

Itó ang ugát ng kabagálan natin sa lahat ng panig ng kapámuhayan. Dito nagmumulá ang halos lahat ng ating kasahulán. Ang ating pagkakimí sa haráp ng dayúhan, ang pagwawaláng-halagá sa saríling kalinangán, ang pagpápabayâ sa kababáyan, ang malábis na panggagagád, ang dí-págkaunawa sa mgá batás – lahat nitó ay dalá ng paggamit sa isáng dayúhang wiká ng pagtuturo sa mabábang páaralán.

**GAWAIN NG LUPON SA AGHÁM** Anó ang lunas? Isáng ganáp at lubós na pagbabágo sa mgá pamamaraan sa mabábang páaralán, upang ang kaalamán at aghám ay maiturò sagitan ng maúgnaying talásálitaang Pilipino.

Sa tinalikdáng kabanatà ay isinalaysáy ni Dr. Rogelio Relova ang kasásayan ng Lupon sa Aghám na siyáng pinagkátiwalaan ng *Linangan ng Wikang Pilipino* na maghandâ ng isáng maúgnaying talásálitaang pang-aghám.

Mula noóng Pebrero ng taóng 1965, ang bawat kublupon ng Lupon sa Aghám ay nagpupulong minsan isáng buwán sa silíd-pulungán ng NIST (*National Institute of Science & Technology*) upang talakáyin ang mgá panukalang-salin na ihinaharáp ng mgá kaanib at sumásailalim sa pangúnang pag-aaral ng Kublupon sa Pánanaliksík.

Lahát ng mgá ngalan, katawagán at pahayág na mapagtibay ng anim na kublupon ay tinitipon, isinasaayos at pinag-uugnáy-ugnáy ng Kublupon sa Ugnayan na pinamúmunuan ni Bb. Virginia R. Reyes, dalúbgurò sa sipnayan (*mathematics*) sa Pámantasan ng Lunsód ng Maynila.

Dahil sa kahusáyan ng demokrátikóng pamamaraáng ginagamit ay kadalásang umaabot sa limampú hanggang isáng daán ang mgá ngalan, katawagán at pahayág na napagtibay sa bawat pulong ng mgá kublupon. Nguni't nagkakaroon din ng mainítang pagtatálo at may iláng katawagán na nagdaán sa maraming pagbabagong-anyô at nangángailangan ng iláng ulit na pagpupulong bago napagtibay.

**DALAWÁNG URÌ NG MGÁ PANGNGALAN** Sa pagsasaayos ng mgá salitáng pang-aghám sa wikang Pilipino, ang Lupon sa Aghám ay gumamit ng isáng pamamaraán na taták-Pilipino nguni't naaayon sa mgá símulain ng makabagong dalúb-wikaán. Ginamit din ngâ ng mgá Insík at Hapón ang nasabing mgá símulain, nguni't sa isáng paraáng dípakusâ at parang waláng malay. Sa unang págkakataon sa kasaysayan ng mgá wikà ay ginamit iyán dito sa Pilipinas sa isáng paraáng tikís, sinadyâ, ganáp at maayos.

Lahát ng mgá **pangngalan** (*nouns*) na ginagamit sa aghám ay hinatì sa dalawáng malawak na pangkát o urì. Ang unang urì ay yaóng **ngalan** (*name*) samantalang ang ikalawáng urì ay yaóng **tawag** (*term*).

Ang **ngalan** ay tumutukoy sa mgá sangkáp, gamit, kasangkapan, sukat, talà, buntalà, bayan, hayop, halaman at ibá páng bagay na nasasaláng at nakikita.

Sa alinmáng wikà, ang mgá **ngalan** ay kadalasang mgá salitáng alitakdain (*arbitrary*) – alalaong bagá'y dí maipaliwanag kung bakit gayón ang anyô. Halimbawà, bakit *bakal* sa Pilipino, *iron* sa Inglés at *hierro* sa Kastila? Bakit *aso* sa Pilipino, *Hund* sa Alemán, *inu* sa Hapón at *dog* sa Inglés? Bakit *sui* sa Insík, *tubig* sa Pilipino at *water* sa Inglés? Ang mgá tanóng na iyán ay hindi mabibigyan ng kasiyá-siyáng kasagutan ng pinakapantás mang dalúbwikà. Waláng nakatatalós. Ang tanging masasabi ay yaón ang mgá **kinagawiáng anyô**. Samakatwíd, ang ngalan ay kinagawiáng anyô o hugis ng salitâ na may kinagawiáng kahulugán. Walâ namán ibá páng paliwanag na kailangan.

Ang **kangalanán** (*nomenclature*) ay ang katipunán o kaayusán ng mgá ngalan sa isáng talásálitaang pang-aghám.

Sa kabiláng panig, sa alinmáng wikà, ang **tawag** ay lagi nang mgá salitáng maipaliwanag kung bakit gayón ang anyô at hugis. Bakit ganóon ang págkakabuô? Saan hinugot? Anó ang salitáng-ugát? Anú-anó ang mgá panlapì o panambál na ikinabit sa nasabing ugát? Tumpák ba ang págkakakabit, at agpang ba sa kahulugán ang ibinungang tawag? Itó ay mgá katanungang dapat na sagutín at ipaliwanag kung sinusurì ang isáng tawag.

Ang **tawag** at yaóng tumutukoy sa mgá símulain, kaisipán, pangyayari, pamamaraán, lakás ng kalikasan, aral at ibá páng mgá págka-kaugnáy na dí nasasaláng at dí nakikita.

Halimbawà, ang tawag na Inglés na *irrigation* ay nabuô sa págkakabit ng unlaping *ir-*, sa loób; ugát na Latín na *rigare*, lagyán ng tubig; at ng hulaping *-tion*, paraán o sakilos na ipinahahayág ng salitáng-ugát. Ang pagkakálapi ng tatlong bahaging nabanggit ay kailángang magíng malinaw at makatwiran; kung hindi ay maituturing na masamá ang nasabing tawag. Ang katapat ng *irrigation* sa Pilipino ay patubig, na binubuô ng unlaping *pa-*, nagpapahiwatig ng layon o kapakanán, at ng salitáng-ugát na *tubig*.

Ang **katawagán** (*terminology*) ay ang katipunán o kaayusán ng mgá tawag sa isáng talásálitaang pang-aghám.

Bakit natin maingat na pinaghiwaláy at pinagbukód ang mgá pangngalan sa mgá *ngalan* at mgá *tawag*? Sapagká't ang págkakaibá ng dalawang pangkát na itó ay may malaking kinalaman sa pagsasalin at pagsasaayos.

### **NGALAN: MGÁ ANYÓNG MAÁARING TUWIRANG HIRÁM**

Sapagká't sa alinmáng wikà, ang mgá ngalan ay waláng tiyák na pamuhatan at nag-iisa o dí nakaugnáy sa ibáng mgá ngalan, kadalasang hinihirám silá mulâ sa ibáng wikà kung waláng katutubong katapat sa sariling wikà. Ang ganyáng tuwirang panghihirám ay likás na ginagawâ ng sama-samang kaisipán ng buóng bayan. Halimbawà, nang ang hayop na *caballo* ay unang sabihin dito ng mgá Kastilang galing sa Mehiko, walâ tayong ngalan sa hayop na yaón, kayá't likás na ang ngalan sa Kastila ay tuwirang hinirám ng mgá Pilipino, likás na binago ang bigkás at baybáy upang mapaangkóp sa dilà at panulatán ng mgá katutubò, at nagíng *kabayo* ngâ.

Ang pamamaraáng itó ay buóng layang ginamit ng Lupon sa Aghám sa pagsasalin ng mgá ngalang pang-aghám sa Inglés na waláng matagpuáng katapat sa Tagalog o sa ibáng pangunahing wikain sa Pilipinas. Narito ang iláng ngalang pang-aghám na tuwirang hinirám mulâ sa mgá banyagang salitâ, sa anyóng pinagtibay ng Lupon sa Aghám:

**1** Ngalan ng mgá bagay:

antenna	.....	antena
airplane	.....	eruplano
vessel	.....	barkó
alkali	.....	alká
acid	.....	asid

**2** Ngalan ng mgá sangkáp:

hydrogen (H)	.....	haydrohén (H)
oxygen (O)	.....	oksihén (O)
nitrogen (N)	.....	nitrohén (N)
silicon (Si)	.....	silikon (Si)
vanadium (V)	.....	banadyum (V)

**3** Ngalan ng mgá talà at buntalà:

Mars	.....	Marte
Jupiter	.....	Hupiter
Mercury	.....	Merkuryo
Cassiopeia	.....	Kasyopeya
Orion, the Hunter	..	Oryon, ang Mán-gangaso

**4** Ngalan ng mgá sukat:

meter	.....	metro
centigrade	.....	sentigrado
watt	.....	wat
radian	.....	radyan
ampere	.....	ampir

**5** Mgá ngalang hinirám mulà sa ibáng wíkain sa Pilipinas:

steel	.....	paslíp (paslep, Ilk.)
gravity	.....	dagsín (dagsen, Ilk.)
design	.....	antangan (Mar.)
energy	.....	kusóg (Hlg. at Bkl.)
strategy	.....	patigayon (Hlg.)

Sinakit ng Lupon na gumamit ng mgá salitáng mulà sa Tagalog at ibáng wíkain sa Kapuluán, kailanma't may matatagpuán. Halimbawà, ang pulutóng ng mgá talà na nginanláng *Capricornus* ay tinapatán ng *Kambing*. Ang *earth* bilang buntalà ay tinapatán ng *dutà* (Bis.) sapagká't ang *lupà* ay nangangahulugáng *land*. Ang sangkáp na *tin* (*estaño*) ay tinapatán ng matandang salitáng Tagalog na *tinggáputi*, na siyang dating tawag sa nasa-bing sangkáp, bagamá't ang sagisag na *Sn* (*Stannum*) ay mananatili.

**TAWAG: MGÁ ANYONG HINUGOT O HINANGÒ**  
Kung ang mgá ngalan ay maáring tuwirang hira-

mín mulà sa wíkaing banyaga kailanma't wala tayong katapat sa sariling wikà, ang mgá tawag namán ay lagi nang dapat buuin mulà sa mgá tumpak na salitáng-ugat (katutubo man o hirám) na kinakabitan ng ating mgá sariling panlapi at panambal sagitan ng mgá pamamagitan itinutulot ng ating balarilà. Sa ganitó, ang págkakaugnáy-ugnáy ng katawagan ay mapangangalagaan kayá't mananatiling madaling unawain ang mgá salitáng pang-aghám sa wikang Pilipino.

Bagama't ang salitáng *kabayo* ay isáng tuwirang hirám mulà sa Kastila, ang mgá salitáng *mangabayo* (*caballear*), *mángangabayó* (*caballero*), *kabayuhán* (*caballeria*) at *kabá-kabayuhan* o *palupo* (*caballete*) ay kusang nangabuô nang gayon sa bisà ng mgá alintuntunin ng wikà na ipinatupad ng sama-samang isipan ng mgá Pilipino sa loob ng ilandaang taong nakaraan.

Ganitó ring panuntunan ang siyang tikis at sadyang ginagamit ngayon ng Lupon sa Aghám sa pagsasalin sa mgá tawag na pang-aghám mulà sa Inglés. Narito ang ilang halimbawà ng katawagang pang-aghám na isinaayos ng Lupon:

<b>1</b>	numeral	.....	pambilang
<b>2</b>	integer	.....	buúmbilang
<b>3</b>	fraction	.....	hatímbilang
<b>4</b>	numerator	.....	panakdâ
<b>5</b>	denominator	.....	pamahagì
<b>6</b>	gravitation	.....	kadagsinán
<b>7</b>	conductor (elec.)	..	saluyán
<b>8</b>	nonconductor	.....	dísaluyán
<b>9</b>	planetoid	.....	malábuntalà
<b>10</b>	alkalinity	.....	kaalkahán
<b>11</b>	acidity	.....	kaasdán
<b>12</b>	regeneration	.....	balikhaan
<b>13</b>	nucleolus	.....	ibutód
<b>14</b>	linguistics	.....	dalúbwíkaan
<b>15</b>	nationalize	.....	sabansaín

Suriin natin ang isáng halimbawa upang lalong mabuting maunawaan kung bakit dapat pagpilitang buuin ang mgá tawag sagitan ng tumpak na salitáng-ugat (katutubò man o hirám) at ng mgá sariling panlapi at panambál. Ang *alkali* ay hinirám at ginawáng *alká* na siyang matandang ugát nitó sa pinagmuláng wikang Arabe. Nguni't kung ang *alkalinity* ay tuwiran ding hihiramín at gagawing *alkaliniti* ay makapagpapasok tayo ng bagong hulaping *-iti* sa ating wikà na waláng kahu-

lugán sa ating balarilà, at waláng ibáng kaugnáy o kahawíg na págkakangamit. Sa gayón ay magiging mahirap maunawaan ang salitáng itó ng mgá mag-aarál, lalo na ng mgá batang nasa mababang páaralán. Sa kabiláng dakò, kung ang *alkalinity* ay tapatán ng *kaalkahán*, hindí na kakailanganin ang maraming paliwanag sa pagtuturò nitó. Sinumang batang higit sa pitóng taón ay nakauunawa ng kahulugán ng kabilaang tambalan ng mgá panlaping *ka-...-an* sa págkakabuò ng mgá salitáng tulad ng *kagandahan*, *katunayan*, *kalakihán*, *kaliwanagan*, atb.

**BAGONG PARAÁN NG PAGTUTURÒ NG AGHÁM** Sa kasalukuyan, ang tunay na aghám ay hindí maiturò sa mgá batang nasa mababang páaralán. Balakid na hindí maigpawán ang mgá salitáng pang-aghám sa Inglés na hangò sa mgá patáy na wikang Latín at Griyego, sapagká't hindí lubós na maunawaan o masakyán ng mgá batang Pilipino. Gayón din ang suliranín ng mgá batang Amerikano: ang mgá salitáng Latín at sinaunang Griyego ay hindí rin nilá ginagamit sa pang-araw-araw na buhay.

Dahil sa sagwíl na itó, iniwasan ng ating mgá mababang páaralán ang paggamit ng mgá salitáng-aghám na hangò sa Latín at sinaunang Griyego. Sa isáng palibot-liham ng Sangáy ng mgá Páaraláng-Bayan sa Lunsód ng Maynila ay nakasaád ang ganitó, sang-ayon sa aming págkakasalin:

*“Lalo na sa Baitáng III, ang mgá tawag at pahayág na pang-aghám na germ at virus, halimbawa, ang gurò ay maáaring gumamit ng mgá pariralang tulad ng maliliít na halaman at hayop na nagdádalá ng sakít sa mgá tao.”*

Bilang katuringán o paliwanag ay maáari ang ganýang maligoy na parirala nguni't hindí kailánman maáaring iturò ang aghám kung waláng mgá tumpák na kangalanán at katawagán.

Hindí maiigpawán ang balakid hanggá't hindí binabago ang wikà ng pagtuturò sa mgá mababang páaralán. Sa ngayón (1969), sariling wikà ang ginagamit sa unang dalawáng baitáng, at wikang Inglés mulá sa Baitáng III hanggáng Baitáng VI o VII. Panahón nang dapat gamitin ang Pilipino bilang wikang panturò sa lahat ng baitáng ng mababang páaralán.

Sagitan ng mgá maúgnaying salitáng pang-aghám na napagtibay na ng Lupon sa Aghám (nakaabot na sa mgá 7,500 sa mgá sandalíng isinusulat itó), ang mgá batayang aghám ay maituturò na mulá sa Baitáng III ng mababang páaralán. Yaóng mgá paksáng katulad ng pánandaan (*algebra*), haynayan (*biology*), kapnayan (*chemistry*) at sugnayan (*physics*) na sa ngayón ay ipinaghihintay sa mgá hulíng taón ng mataás na páaralán, ay maáari nang iturò sa mgá baitáng na III hanggáng VI o VII.

Ang mgá aghám na binanggit ay hindí mahirap. Kayang-kaya siláng unawain ng mgá batang sampû hanggáng labíng-apat na taóng gulang, kung maituturò sa isaíng wikang kaugnáy ng wikang ginagamit sa tahanan at pamayanán. Ang nagpapahirap sa aghám ay ang mgá salitáng Inglés na hangò sa mgá patáy na wikang Latín at sinaunang Griyego.

Kung ang mgá batà ay nakauunawà na ng aghám sagitan ng maúgnaying talásálitaang Pilipino, madalí na niláng mapag-aaralan ang aghám sa wikang Inglés. Magíng ang wikang Inglés na rin ay madalíng matututuhan. Ang alínmang wikang banyagà ay madalíng matututuhan kung ang isip ng nag-aaral ay nasa gulang na at mayroón nang lamáng kaalamán at karunungan.

**PAGBABAGO SA MABABANG PÁARALÁN** Huwág nating maliitín ang halgá ng mababang páaralán. Sa loob ng anim o pitóng taón na itinitigil ng mgá batà sa mababang páaralán, silá ay nasa pinakamabuting panahón ng buhay upang tumanggáp at makaunawà ng kaalamán. Hutukin ang kaniláng isip. Malinis at waláng basura ang kaniláng alaala. Mabilís ang kaniláng pangmalay. Matalas ang kaniláng kawilihan. Waláng magugulóng adhikà sa kaniláng kaloóban.

Sa gulang na pitóng taón, na siyáng kadala-sang gulang ng batà sa simulá ng mababang páaralán, ang pangkaraniwang batà ay matatás na sa kanyáng sariling wikà. Supíl na niyá, bagamá't hindí niyá alám itó, ang balarilà ng nasa-bing wikà, at malaya niyáng nagagamit ang mgá pangkaraniwang salitâ sa tahanan at pamayanán. Nasasabi na niyá ang halos lahat ng maibigang sabihin. Sa mgá darating na panahón ng kanyáng buhay, walâ nang mapaparagdág sa kanyáng kasanayang pangwikà kundí kaunting kinis ng pananalitâ at malawak na talásálitaan.

Ang batang itó, sa pagitan ng mgá gulang na pitó hanggáng labíntatlo o labíng-apat na taón, ay nakahandâ nang tumanggáp ng batayáng kaalamán sa anim na pangunahing larangan ng aghám: sipnayan (*mathematics*), sugnayan (*physics*), kapnayan (*chemistry*), haynayan (*biology*), ulnayan (*social sciences*), at batnayan (*philosophy*). Subali't sa ilalim ng ating kasalukuyang paraán ng pagtuturò, siyá ay hindi tinuturuan; o hindi maturuan, ng nasabing aghám. Sa halíp ay natatapan lamang siyá ng kaunting madadalíng kaalamán tungkól sa kalúsugan, sa pamamayan at sa pagbilang.

Sa halíp na dumulang ng kaalamán, ang ating mgá batang nasa mababang páaralán ay nagsasayang ng panahón sa pagsisikap na mag-aral ng kaalamán sagitan ng isáng wikang hindi nilá naiintindihán. Dahil sa malíng pamamaraáng iyán, dahil sa paggamit ng dí tumpák na wikang panturò, ang batà ay mabagal matuto ng kaalamán at magíng ng wikang Inglés.

Hindi lamang ang batang Pilipino ang nahihirapan sa pag-aaral ng aghám sagitan ng wikang Inglés. Magíng ang mgá batang Amerikano na rin, at ang mgá batang Inglés, at patí ibáng lahing gumagamit ng wikang Inglés sa kaniláng tahanan, ay nahihirapan din. Bakit? Sapagká't ang wikang Inglés ay tigib ng mgá salitáng hangò sa mgá sinaunang Latín at Griyego, mgá salitâ mulâ sa dalawang wikang patáy na at hindi na sinasalitâ sa tahanan at sa pámayanán ng alínmang bansâ. Ang Inglés ay isáng wikang dímaúgnayin.

Daíng ng mgá batang Hapón ang mgá batang kanluranín sa pag-aaral ng aghám, sapagká't sa wikang Niponggo na ginagamit sa pagtuturò ng aghám sa mababang páaralán ay halos waláng mgá batayáng katawagáng pang-aghám na hangò sa Latín at Griyego. Lahát ng mgá pangunahing salitâ sa aghám ay hangò sa mgá salitáng-ugát at panlapi na ginagamit sa tahanan at pámayanán ng mgá batà.

Huwág nang pag-usapan ang aghám; kahit na sa pag-aaral ng pagbasa ay atrasado ang karaniwang batang Amerikano dahil sa kasálimuután ng kanyáng alpabeto at paraán ng pagbaybáy sa mgá salitâ. Sa wikang Inglés, ang pag-aaral ng "spelling" ay isáng gawaing natatapos lamang sa libingan. Magíng ang mgá palásulát at palábasá ay madalás mangailangang sumangguni sa kaniláng mgá talátinigan upang matiyák ang baybáy

ng gayón at ganitóng salitâ.

Itó ang dahilán kung bakit ang batang Pilipino ay atrasado kung ihahambíng sa batang Amerikano, at lalong atrasado kung ihahambíng sa batang Hapón. Talagáng hindi siyá matuturuan ng aghám hanggá't hindi ginagawáng wikang panturò sa buóng mababang páaralán ang kanyáng pambansáng wikà.

Hindi bago ang mungkahing itó. Makailán nang ginawâ sa mgá nakalipas na panahón, subali't hindi maipatupád dahil sa kawalán ng mgá salitáng-aghám na magagamit. Nagkaroón ng mgá palagáy na mgá salitáng Inglés at Kastila na rin ang dapat gamitin, baybayín lamang at bigkasín sa pamamaraáng hinihingi ng ating balarilà. Sa wari ko'y hindi rin mabuti ang nasabing palagáy sapagká't waláng gumagamit at gumagawâ nitó sa maayos at lansakang pamamaraan.

Subali't mulâ nang mapatatág ang Lupon sa Aghám, at makitang itó ay mananatili at magkakabunga, ay nagkaroón ng pag-asang maipatupád ang lumang mungkahi. At ngayón ngáng naryari na ang unang hipnò (*edition*) ng isáng maúgnaying talásálitaang pang-aghám na nagtataglay ng mgá 7,500 salitâ, ang dating pag-asa lamang ay nagiging katiyakan na ngayón.

Nakahandâ na tayong magsimulâ ng "himag-sík" sa pagtuturò ng aghám sa mababang páaralán.

Ipagpalagáy natin na ang tigpóng araw sa pagsisimulâ ng bagong paraán ng pagtuturò ay sa pagbubukás ng taóng pampáaraláng 1971-72, anó ang unang hakbáng na kailangang gawín ngayón?

**ANG SUSÌ SA MAÚGNAYING TALÁSÁLITAAN** Magíng sa kasalukuyan (1969) ay wikang sarili na ang ginagamit sa mgá páaraláng bayan sa buóng bansâ sa mgá Baitáng na I at II. Sásamantalahín natin ang mabuting pangyayaring itó.

Sa Baitáng I at II ay ituturò sa mgá batà ang tinatawag na Lupon na "Susì ng mgá Batà sa Wikà ng Aghám." Itó ay binubuò ng dalawang bahagi, na kapwa naglalayong mabigyán ang mgá batà ng sanligang talásálitaan (*background vocabulary*) na makapagpápabilís sa págkatuto nilá, sa mgá Baitáng III, IV, V at VI (at VII kung mayroón ni-

tó) sa 7500 salitáng nakapaloób sa “Maúgnaying Talásálitaang Pang-aghám.”

Ang Unang Bahagi ay para sa Baitáng I at ang Ikalawáng Bahagi ay para sa Baitáng II. Ang Susi ay binubuò ng 200 piniling pangkaraniwang salitáng Pilipino (kasama ang iláng salitáng dí-Tagalog) na may ganitóng uri o katangian:

- 1 mgá kasalukuyang salitáng-ugát ng Tagalog na gamitín sa aghám;
- 2 iláng matatandáng salitáng Tagalog na magagamit na ugát ng mgá salitáng pang-aghám;
- 3 iláng salitáng dí-Tagalog na inilangkáp ng Lupon sa Aghám sa Talásálitaan, bilang ugát at malápanlaping panambál;
- 4 mgá salitáng nagpapakilala sa ibá’t ibáng uri ng diín sa panuldikan ng Balarilà;
- 5 mgá salitáng nagpapakilala sa ibá’t ibáng paraán sa pagbubuò ng salitáng Pilipino (pag-uulit ng pantíg, pag-uulit ng salitâ, pagbabangháy, paglalapì, pagtatambál);
- 6 mgá salitáng nagpapakilala ng ibá’t ibáng uri ng paglalapì (inúnlapian, hinúnlapian, kábilan, ginítlapian, laguhan); at
- 7 halimbawà ng sabayang paglalapì at pagtatambál.

Ang 200 salitáng iyán na bumubuò sa una at ikalawáng bahagi ng Susi ay ituturò sa mgá batà sagitan ng mgá larò, tulâ, áwitin, pag-uusap, pag-sásalaysáy ng gurò, dulá-dulaan, paglalarawan sa mgá taltaguhit, kartelón at poster, paglahók sa mgá palátuntunan at ibá páng paraáng nakalílibáng na karaniwang ginagamit sa una at ikalawáng baitáng ng mababang páaralán. Karagdagan sa mgá salitáng kasalukuyang ginagamit ngayón, ang mgá aklát-araláng katulad ng “Pepe at Pilár” ay dapat gumamit ng mgá salitâ ng Susi, na madalí ring matutuhan nguni’t may higit na malakíng págkakaugnáy sa wikâ ng aghám.

Hindí kailangang ang 200 salitâ ng Susi ay matutuhan ng mgá batà sa kaniláng tiyák na kahulugáng pang-aghám. Hindí rin kailangan na mawnawaan nilá ang mgá tumpák na anyóng pambalarilà ng mgá salitáng nasabi. Hindí natin dapat

asahan na ang mgá bagay na iyán ay maintindihán ng mgá batang nasa Baitáng I at II. Ang tangging layon ng Susi ay maitambád ang kaniláng pangingin at pandiníg, at marahil ang kaniláng pangmalay, sa 200 batayang salitáng iyán upang sa darating na mgá taón, mulâ sa Baitáng III, ay hindí silá maninibago kung kaniláng matagpuáng mulí ang nasabing mgá salitâ sa mgá gamit at kaligiráng tunay na pang-aghám.

Sagitan ng palásálitaang pantahanan at pamámayanán, na supil na ng mgá batà, at sa tulong ng 200 piniling salitâ ng Susi, ang mgá mag-aarál sa mgá Baitáng III, IV, V at VI ay madalíng makauunawa sa 7,500 maúgnaying salitáng pang-aghám ng Talásálitaan ng Lupon.

**PAGTUTURÒ SA MGÁ MAGTUTURÒ** Kasabáy ng pagtuturò sa Susi sa mgá batà ay dapat magdaos ng mgá binhísipan o seminar para sa mgá gurong magtuturò ng aghám at kaalamán sa mababang páaralán. Malawak ang saklâw ng kaalamán; dalá nitó ang kasaysayan, ang kagándahang-asal, ang pamamahalâ sa tahanan, ang pagtuturò ng wikâ. Dahil dito, ang binabalak na binhísipan ay dapat sumaklâw sa lahat ng gurò sa mababang páaralán, magíng sa mgá gurong nagtuturò ng wikang Inglés.

Sapagká’t sa mgá kalagitnaan ng Hulyo ng taóng 1971 dapat simulán ang “himagsík,” ang pahuway o bakasyóng pantag-inít na darating ang siyáng angkóp na panahón upang pagdausan ng binhísipan. Matatapos ang sinundáng mgá aralán sa hulíng linggò ng Abril kayá’t ang buóng buwán ng Mayo at Hunyo ay maáaring iukol sa gagawing binhísipan.

Sa unang bahagi, o sa unang buwán, ng binhísipan ay maáaring pagsamá-samahin ang lahat ng gurò ng buóng páaralán, upang matalakay ang mgá lahatáng símulain ng paksâ, at masanay sa paggamit ng mgá lansakang katawagán na kakailanganin ng lahat ng tagapágturò, magíng anumán ang kanyáng araláng tuturuan.

Sa ikalawáng bahagi, o sa ikalawáng buwán, ng binhísipan ay maáaring paghiwá-hiwalayín ang mgá gurò, at pagpangkát-pangkatín nang sangayon sa kaniláng paksáng ituturò. Ang magtuturò ng sipnayan ay bubuò ng isáng pangkát, gayón din ang magtuturò ng sugnayan, atb. Sa kaniláng papangkát na pagpupulong, hindí lamang mgá salitâ at katawagán ang kaniláng dapat pag-

usapan. Silá na rin ang dapat yumari ng balangkás ng pag-aaral o “course of study” sapagká’t hindi nilá mapakikinabangan ang mgá dating balangkás na ginamit sa panahón ng pagtuturò sagitan ng wikang Inglés.

Sa ganitóng paraán ay hindi mangangailangan ng mgá tanging gurò o tagápanayám upang siyáng magturò sa mgá gurò. Ang mgá gurò na rin ang magtuturò sa kaniláng sarili, batay sa mata-tagpuán niláng mgá símulain at katawagáng nasa “Maúgnaying Talásálitaang Pang-Aghám” ng Lupon sa Aghám.

Sagitan ng ganitóng paraán ay maáring magkasabáy-sabáy ang pagdaraos ng binhísipan sa lahat ng mababang páaralán sa buóng Lunsód ng Maynila, o magíng sa lahat ng mgá lalawigang Tagalog. Sa mgá lalawigang dí-Tagalog ay maáring mangailangan ng kaunting panahón upang makapangalap ng mgá gurong magtuturò ng bagong pamamaraán sa matatás na wikang Pilipino. Hindi inaakalang itó ay magiging malakíng sagwíl. Likás na magkakahawíg ang lahat ng mgá pangu-nahíng wíkein sa Pilipinas at sa “Maúgnaying Talásálitaang Pang-Aghám” ay sadyáng pinatindi ang ganyáng págkakahawíg at págkakalapít-lapít sagitan ng paggamit ng maraming salitâ mulâ sa Bisayà, Kapampangan, Bikol, Ilúko at ibá pá.

Anupá’t sa loób ng mgá dalawá o tatlong taón mulâ sa pagpapasyá ng mgá natutungkuláng pinuno, ang paggamit ng panimuláng talásálitaang panturò ay maáring ipatupád sa buóng bayan.

**PAGHAHANDÂ NG MGÁ AKLÁT** Ang paghahanda ng mgá aklát-aralán para sa bagong pamamaraáng ito ng pagtuturò ng aghám ay isáng gawaing magbibigay ng malaking halga sa mgá gurò at manunulat na Pilipino. Sa ngayon, ang kalahang bahagi ng mgá aklát at katularing babasahin ay inaangkat natin mulâ sa Banwang Pinisan o Estados Unidos. Magíng yaong pangilan-ngilan na sinusulat dito ay halos haláw lamang sa mgá aklát na sinulat ng dayuhan. Tila ba wala tayong tiwala sa mgá aklát na maári nating sulatin; para bang nananaig sa atin ang paniniwalang higit na dalúbhasà ang dayuhan sa mgá bagay na iyan.

Subali’t sa gawang pagsulat ng mgá babasahing-aghám sa wikang Pilipino, tayong

mgá katutubo sa bayang ito ang siyáng magiging pinakadalúbhasà sa buóng daigdig. Tayo ang pagtatanungan at hindi tayo ang magtatatnong. Tayo ang magtatakda ng pamantayan, at hindi tayo ang manggagagad. Tayo ang magpapasya ng mgá kabaguhan at kaibahan, sa halip nang tayo ang manghihingng lagi ng pahintulot.

Bawa’t gurong Pilipino ay maáring magíng isáng mángangathâ, isáng mánunulát, isáng mánlilikhâ.

Sa simulâ o sa unang taon ng pagpapagamit sa panimuláng talásálitaang panturò, hindi maiwasang mgá balangkas-aralán lamang ang makakayang ihanda ng mgá gurò. Ang nasabing mgá balangkas-aralán ay ibabatay nila sa mgá kapaksaán na ipagpapasya ng mgá natutungkulang pinuno ng Kagawaran ng Pagtuturò, at sa mgá salitáng matatagpuan nila sa Talásálitaang Pang-Aghám.

Maáring mangyari na ang ilang salitáng pang-aghám na nais gamitin ng isáng gurong sumusulat ng isáng aklát o balangkas, ay wala sa 7500 laman ng Talásálitaan. Ang mgá ganyang salitâ ay dapat na kagyat na ipaalam sa Lupon sa Aghám upang matawagan nitó ang kinauukulang kublupon, na magdaraos ng dagliang pulong upang pagpasyahan ang tumpak at maúgnaying salin. Makabubuti na sinumang gurong maghaharap ng ganyang salitâ upang isalin ay magsama na ng isáng mungkahing salitâ na maisasaalangalang ng kublupon. Nguni’t hindi kanais-nais na ang masabing mungkahing salitâ ay gamitin agad ng gurò sa kanyang sinusulat na aklát o balangkas, nang walang pagsang-ayon ng Lupon sa Aghám. Kailangang maiwasan ang págkakasalungatan ng mgá anyo at pamuhatan ng mgá salitâ sa loob ng Maúgnaying Talásálitaan.

Dapat alagatain ng lahat na sa paláaghaman, ang wikang panturò ay dapat magíng maúgnayin sa dalawang paraan: bawa’t tawag ay dapat magíng maúgnayin sa mgá salitáng kahangò niyá, at ang buóng katawagan ay dapat magíng maúgnayin sa mgá ugat at panlapi ng wikang Pilipino. Subali’t ang mgá salitáng-ugat, na maáring katutubo o hiram, ay mgá ngalan lamang kaya’t dí kailangang magíng maúgnayin sa ibáng salitâ, tangi na lamang sa págkamaúgnayin sa bigkás at baybay.

Kasumunod sa panunulat ng mgá aklát-aralán ay magiging masigla ang pagpapalimbag, paglathala at pagbibili ng mgá aklát na nasusulat sa wikang Pilipino. Matatangay na rito ang paglathala ng lahát ng uri ng mgá babasahing Pilipino, kasama na ang mgá pahayagan.

“Magkakahalga ang darak,” wikà ngà ng mgá tagálalawigan.

**TALÁARALÁN NG PAGTUTURÒ** Natalakay na natin ang mgá dahilan kung bakít dapat baguhin ang ating páтуруáng-aghám, kung papaano itó dapat baguhin, kung anong mgá bagong paksâ ang ituturò, kung paano dapat ihanda ang mgá magtuturò sagitan ng panimuláng wikang panturò, at ang mgá aklát na dapat gamitin sa nasabing pagtuturò. Ngayon namán ay talakayin natin kahit pasapyáw ang kung anong kaayusan ng mgá paksâ ang dapat masunod. Maáring gayari ang magíng anyo ng isáng taláaralán ng pagtuturò:

<b>Baitáng I</b>	Pagbása ng Wikang Pilipino Pagsúlat ng Wikang Pilipino Susì, Unang Bahagì Bilnuran Ibá páng Paksâ sa Baitáng I
<b>Baitáng II</b>	Pagbása ng Wikang Pilipino Pagsúlat ng Wikang Pilipino Susì, Ikalawáng Bahagì Bilnuran Aghám at Lusóg Wikang Inglés Ibá páng Paksâ sa Baitáng II
<b>Baitáng III</b>	Pagbása ng Wikang Pilipino Pagsúlat ng Wikang Pilipino Bilnuran Lahatáng Aghám Wikang Inglés Ibá páng Paksâ sa Baitáng III
<b>Baitáng IV</b>	Pagbása ng Wikang Pilipino Pagsúlat ng Wikang Pilipino Múlaing Kapnayan Wikang Inglés Ibá páng Paksâ sa Baitáng IV
<b>Baitáng V</b>	Pánitikán ng Wikang Pilipino

	Balarilà ng Wikang Pilipino Múlaing Pánandaan Múlaing Sugnayan Wikang Inglés Ibá páng Paksâ sa Baitáng V
<b>Baitáng VI</b>	Pánitikán ng Wikang Pilipino Balarilà ng Wikang Pilipino Múlaing Sukgisan Múlaing Haynayan Wikang Inglés Ibá páng Paksâ sa Baitáng VI
<b>Baitáng VII</b>	Pánitikán ng Wikang Pilipino Balarilà ng Wikang Pilipino Múlaing Tatsihaan Múlaing Ulnayan Wikang Inglés Ibá páng Paksâ sa Baitáng VII

Mapapansin natin ang sumusunod na mgá katangian ng taláaraláng itó:

- 1 ipinapalagay na tiyak ang pagbabalik ng Baitáng VII sa lahát ng mababang páaralán sa hinaharap;
- 2 lahát ng mgá kapaksaán (*subjects*), mula sa Baitáng I hanggáng Baitáng VII, maliban sa wikang Inglés, ay ituturò sagitan ng wikang Pilipino;
- 3 ang wikang Inglés ay sisimuláng iturò sa Baitáng II hanggáng Baitáng VII, bilang isáng kapaksaán lamang;
- 4 ang limang pangunahing sangay ng kaaghaman (sipnayan, sugnayan, kapnayan, haynayan at ulnayan) ay ituturong lahát sa kaniláng múlaing anyô (*elementary form*) bago matapos ang Baitáng VII.

Ano ang magiging bunga ng bagong pamamaraáng itó?

Bago natin sagutin ang tanong ay suriin muna natin kung ano ang bunga ng kasalukuyang mababang páaralán. Itó ay isáng lalabing-apatang taong bata na hindí mahusay sa anumang wikà-hindí sa kanyang katutubong wikà at hindí rin sa wikang Inglés. Ang dating katatasán sa wikang sarili nang siyá ay pitóng taong gulang ay napali-

tan ng kawalang-tiwala sa sarili, ng kakimián, at ng pagatól-gatól na págsasalitâ – bunga ng ugali ng ilang gurò na maliitin ang sariling wikà kung ihinahambing sa Inglés. Halos wala siyáng nalalamang aghám. Hindí siyá makapágsalitâ sa harap ng madlá. Hindí siyá angkóp para sa kahit anong gawain sa isáng tanggapan, tangi marahil sa gawain ng tagáhatíd o tagálinis. Hindí siyá masasahang magíng mabisang tagáttaguyod ng kabuhayang bansâ. Halos wala siyáng natutuhan kundi ang mgá gawi at panlasang makabanyaga, kaya't madali siyáng paglakuan ng anumang bagay, kaisipan o bilihing yari o likha sa ibáng bansâ. Siyá ay sagutin at alalahanin ng pamayanan at ng ulhong (*society*).

Sa kabilang dako, ang magiging bunga ng bagong paraan ng pagtuturò ng aghám ay isáng batang lalabing-apatang taong gulang na mahusay sa kanyang sariling wikà at may matatag na kaalaman sa mgá múlaing aghám (*elementary sciences*). Siyá ay mulát at gising, at may buóng tiwala sa sarili. Kung kailangan ay maári siyáng mág-salitâ sa harap ng madlá o sa ibabaw ng isáng tanghalan. Sa isáng tanggapan ay maári siyáng pakinabangan bilang isáng katulong na tagásulat. Kahit na hindí iniisip ay gumagawa siyá ng mgá kilos at kapasyahang makapagtataguyod sa kapamuhayang bansâ. Maluwag sa kanyang loob ang pagtangkilik sa mgá bagay at kaisipang yari at likha sa kanyang bayan. Siyá ay tunay na kapakinabang sa kanyang pamayanan at ulhong.

Maáring itanong: Oo ngá't ang bagong bagong iyan ng mababang páaralán ay maalam ng aghám sa maúgnaying wikang Pilipino, nguni't sino ang kakausapin niyá tungkol sa aghám sa nasabing natatanging wikà?

Sa simulâ ng palágawaang itó ay kakaunti ngá ang kanyang makakausap, liban sa kanyang mgá gurò at kamag-aral, nguni't siyá ay nag-aral din ng Inglés at kung kailangan ay sa Inglés niyá kakausapin yaong hindí pá sanay sa maúgnaying talásálitaang-aghám sa Pilipino.

Sa unang ilang taon ng "himagsik," ang pangunahing katungkulan ng aghimuing (*technical*) Pilipino ay bilang isáng panimuláng wikang panturò, subali't mabilis itóng kakalat upang magíng wikang panggawain ng mgá dalúbhasà sa aghám. Mulâ rito, ang maúgnaying talásálitaan ay unti-unting tatagas at mamamalasak sa madlá.

Ang bagong bunga ng mababang páaralán

ay maáring magpatuloy sa mataás na páaralán at magíng sa dalúbhasaán kung kanyang nais, at kung kaya ng kanyang mgá tagapátaguyod, dili kaya'y kapag nahandugan siyá ng isáng paaral (*scholarship*) kung namumukod ang kayang talino. Sa ganyan ay makapagpapatuloy siyá ng pag-aaral ng lalong matataás na kaalaman sagitan ng maúgnaying wikang Pilipino, ng wikang Inglés, ng Kastila, Aleman o anupamang makabagong wikà.

Subali't ipinakikita ng mgá kaulatan ng Kagawaran ng Pagtuturò na mgá 75 bahagdan ng mgá tapos sa mababang páaralán ang hindí nakapagpapatuloy ng pag-aaral. Magíng ganitó man ang kapalarang sapitin ng ating tapos sa bagong paraan ng pagtuturò, siyá ay nakahanda nang magíng isáng mabuting mamamayan, isáng tapat na ama o ina ng tahanan at isáng mabungang manggagawa o mangangalakal. Maári na niyáng ipagpatuloy sa kanyang sarili ang pagduláng ng karagdagang kaalaman, magíng sa kanyang sariling wikà o sa wikang Inglés.

At higit sa lahat, siyá ay nakaayon na sa hugis at tunguhin ng mgá bagay na darating dito sa ating bayan.

Oktubre 1969

# SUSÌ NG MGÁ BATÀ SA MAÚGNAYING TALÁSÁLITAANG PANG-AGHÂM

## UNANG BAHAGÌ

1	bilang	number	41	likô	curved, warped
2	dami	quantity	42	tumpák	proper
3	ísip	mind	43	taknâ	time
4	dagdág	increase	44	lipon	group
5	bawas	decrease	45	lináng	cultured
6	sukat	direct measurement	46	tunay	real
7	hafi	part, partition	47	linig	tone
8	awán	none, nothing	48	sukdól	extreme, maximum
9	lahát	all	49	tawag	term
10	mulâ	from, source, origin	50	nisnís	unravel, out up
11	tuós	computer	51	singkád	exact
12	táya	estimate	52	ulit	repetition
13	lutás	solve (a problem)	53	buód	summary
14	ganáp	complete	54	wastô	correct
15	tuktók	top, summit	55	tungo	direction
16	tangi	special	56	lupon	committee
17	bantók	arc	57	saysáy	narrate, relate
18	liwás	out of the ordinary	58	turing	define, definition
19	lawak	area (in general)	59	bana	husband
20	ulat	report, data	60	tungâ	center
21	lingkód	service	61	gitnâ	middle
22	uri	kind, class, type	62	ísig	force
23	larang	field	63	tulot	permission
24	latag	spread, unroll	64	hawig	similarity
25	payâk	simple	65	lawig	duration
26	gílid	edge	66	basal	abstract
27	dayag	surface	67	gansál	odd
28	tuwáng	help, assist	68	tukól	even
29	buô	whole, complete	69	tinging	sediment
30	lihís	deviating, erroneous	70	inog	rotation
31	lunan	place, location, site	71	ikot	revolution
32	unlád	development	72	sunód	next
33	lulan	capacity, load	73	kilos	motion
34	ngalan	name	74	bunga	result, product
35	lundô	center	75	lakíp	compose, composite
36	silíd	cell, room	76	balhág	imperfect
37	laraw	figure	77	labí	excess, remainder
38	masíd	observation	78	labis	excessive
39	lambál	multiple, double	79	lantáy	prime
40	buók	volume	80	bayló	change

81	angkóp	suitable, proper
82	taning	term
83	maliw	reduction
84	lukób	convexity
85	lukóng	concavity
86	siksík	dense
87	sinsín	closeness of intervals
88	butód	nucleus
89	binhî	seedling
90	bilís	speed

91	tulin	velocity
92	dasig	increase of speed
93	hunà	intelligent guess
94	kusà	voluntary
95	tiláw	trial, experiment
96	hadláng	obstacle
97	ligíd	to go around, revolve
98	singáw	vapor, steam
99	tungos	point (abstract)
100	sadyâ	intentional

## IKALAWÁNG BAHAGÌ

1	buhay	life
2	butil	grain
3	ayos	arrangement
4	tatag	organize, establish
5	tatág	firmness, stability
6	tuwíd	straight
7	hugis	shape
8	antáng	design
9	sikwáy	repel, repulse
10	dawit	involvement, include
11	galáw	motion
12	agwát	interval, distance
13	kintáy	condense
14	dagsín	gravity
15	lamíg	coldness, coolness
16	aral	lesson, teaching
17	anyô	form
18	mulí	again, repetition
19	talà	star (astronomical)
20	tingob	gather, concentrate
21	libot	around, go around
22	tinig	voice, speech sound
23	tigil	halt, stoppage
24	tandâ	sign
25	kublí	hidden, covered
26	abay	companion, aide
27	sanay	practice
28	paslíp	steel
29	balík	return, revert
30	higít	superior to
31	hanay	line (of objects, etc.)
32	lawas	body
33	gawâ	action, act, doing
34	sulúd	inside, enter
35	punò	trunk, chief

36	lagì	always, ever
37	dakô	huge, great
38	sipat	peer, see, look
39	ugnáy	connection, relation
40	lagom	collect, gather
41	hatíd	deliver, convey
42	mikmík	small things
43	daglî	instant, quick
44	tingî	singly, retail
45	tipik	particle
46	lipád	flight
47	tahás	affirmative, positive
48	iglap	short interval of time
49	tanggál	disconnect, remove
50	surî	analysis
51	talâ	note, record
52	tuhog	to pierce through
53	likhâ	create
54	likás	natural
55	bisà	effect, effectiveness
56	hasík	sowing
57	laláng	contrivance, device
58	takad	base, foundation
59	dutà	soil, earth, ground
60	sukod	indirect measure
61	tiyák	certain, certainty
62	sugâ	light
63	labáw	excess
64	takdâ	limit, boundary, term
65	baling	facing, orientation
66	tuntón	track, trace
67	aghám	science
68	sangkáp	substance
69	bumbóng	cylinder
70	bahagì	part, portion

<b>71</b>	dagitab	electricity
<b>72</b>	daigdíg	earth, world
<b>73</b>	ulnong	society (in general)
<b>74</b>	mag-aral	study
<b>75</b>	dílikás	unnatural
<b>76</b>	maanyô	formal
<b>77</b>	taluhog	axis, axle
<b>78</b>	sukatán	measuring scale
<b>79</b>	saayos	process
<b>80</b>	kaugnáy	related, joined
<b>81</b>	pamunò	leader
<b>82</b>	gawa-gawâ	artificial
<b>83</b>	dalúbhasà	expert
<b>84</b>	tagahatíd	messenger
<b>85</b>	parisukat	square

<b>86</b>	taglamíg	cold season, winter
<b>87</b>	binumbóng	cylindrical
<b>88</b>	lahatán	general
<b>89</b>	karamíhan	the majority
<b>90</b>	malábutil	granular
<b>91</b>	pásanayán	training
<b>92</b>	mag-aarál	student
<b>93</b>	tanggalín	disconnect, remove
<b>94</b>	balík-aral	review, restudy
<b>95</b>	mánlilipád	flyer, aviator
<b>96</b>	sánlibután	the universe
<b>97</b>	makadaigdíg	worldly
<b>98</b>	palábigkasan	pronunciation rules
<b>99</b>	luksúntiník	a skipping game
<b>100</b>	naglumagian	to overstay (plural)

# MGÁ BATAYÁN AT ALITUNTUNIN SA PAGHAHANDÂ NG MAÚGNAYING TALÁSÁLITAANG PANG-AGHÂM

(Pinagtibay ng Lupon sa Aghâm sa unang pulong nitó noóng Pebrero 12, 1965)

- 1 Isalin sa Pilipino ang lahát ng mgá tawag na pang-aghâm sa mauunlad na wikang banyaga, subali't yaong mgá ngalan lamang ng mgá bagay, hayop, halaman, sangkap, sukat, talà atb., na wala sa ating wikà ay hindi kailangang isalin bagama't dapat bigkasín at baybayin sang-ayon sa palábigkasan at palátitikang Pilipino. Ang mgá ngalang Latin ng mgá halaman at hayop ay patuloy na gagamitin sa katulad na paraan ng paggamit nitó sa Inglés.
- 2 Sa pagsalin ng katawagang pang-aghâm sa Pilipino ay gamitin ang mgá batas ng pagpapalawak-wikà sa ganitóng págkakasunúd-sunód:
  - A Mgá katutubong salitâ (mulâ sa Tagalog at ibáng pangunahing wíkain sa Pilipinas)
  - B Mgá hinangò o hinugot na salitâ mulâ sa mgá katutubong salitáng-ugat sa pamamagitan ng mgá panlapi, panambal at palábuuan ng wikang Pilipino.
  - C Mgá hiram na salitâ sa pamamagitan ng alinman sa apat na uri ng panghihirám:
    - I lipat-hiram o *loanshift*
    - II saling hiram o *loan translation*
    - III haluang hiram o *loan blend*
    - IV tuwirang hiram o *direct loan*
 sa pasubali na ang tuwirang hiramín sa mgá banyagang wikà ay mgá salitáng-ugat lamang, o mgá salitáng maituturing na salitáng-ugat pag pumasok na sa Pilipino.
- 3 Kung may dalawa o higit páng salitáng mapagpipilian, ang salitáng lalong maikli, maliwanag, mabisà at madaling bigkasín ang siyáng pipiliin.
- 4 Ang salin ay isunod sa nakagawiang kayarian sa Inglés o Kastila maliban kung ang ganyang pagsunod ay makapagpapaiba ng kahulugan o makagugulo sa isip ng gumagamit.
- 5 Panatilihin ang mgá salitáng palasak na at nakitang mabisà at angkóp, maliban na lamang kung may matagpuang lalong mabuti.
- 6 Iwasan ang paggamit ng mgá salitáng may diwa o tunog na katawa-tawa o kakatwâ.
- 7 Ang mgá kahawig na salitâ o tawag na ginagamit na ng alinmang kublupon ay ituring na singkahulugan.
- 8 Ang mgá tawag na hangò sa Latin o Griyego, kung nauunawaan ng marami, ay maáring gamitin bilang singkahulugan, lalo na sa pag-uusap sa mgá panimuláng panahon ng pagpapalaganap sa Maúgnaying Talásálitaang Pang-aghâm, nguni't ang mgá salitáng nasa-bi ay dapat masulat nang ayon sa palátitikan ng wikang Pilipino.
- 9 Ang Maúgnaying Talásálitaang Pang-aghâm ay para sa mgá paham, pantas at dalúbhasà sa aghâm, kaya't sa paghahanda nitó ay kailangang alagatain ang kapakanan ng nasabing mgá taong may kinalaman sa aghâm.
- 10 Sakitin na ang mgá katawagang pang-aghâm ay magtaglay ng sumusunod na mgá katangian:
  - A Tiyak ang kahulugan
  - B Malinaw ang págkakaibá sa anumang salitáng kahawig
  - C Matining (hindi pabagu-bago ang kahulugan)
  - D Maúgnayin sa anyo ng ibáng tawag na may kaugnay o katugong kahulugan
  - E Nakaugnay sa wikang sinasalitâ ng mgá batang pipituhing taong gulang
  - F Hutukin (magagamit na pangngalan, pandiwa at iba páng bahagi ng pananalita)
  - G Matapat sa kahulugan (hindi *misnomer*)

- H Mabunga (magaang bumuô ng ibáng salitâ)
- I Magaang bigkasín

## ANG MGÁ AGHÍMUING PANAMBÁL

(The Technical Combining Forms)

1	ag- ( <i>agham</i> )	science
2	alú-	recurring, circulating
3	awán- (llk.)	absence of
4	ayon-	pro, in favor of
5	babaw-	epi-
6	balí-, balík-	re-
7	balíng-, balín-	negative
8	balnì- ( <i>balani</i> )	magneto-
9	bil- ( <i>bilang</i> )	number, numeral
10	-bilos ( <i>bisang kilos</i> )	action (chemistry)
11	-bisà	effect
12	buhág-	pneumato-, of or pert. to gases
13	butúd-	karyo-, pert. to nuclei of cells
14	buúng-, buúm-, buún-	integral, whole
15	kap- ( <i>sangkap</i> )	of or pert. to chemistry
16	-kay ( <i>takay</i> )	term (of an algebraic expression)
17	kilo-	kilo-, one thousand
18	kilus-	motive (electricity)
19	kub- ( <i>kubli</i> )	sub-
20	kubús- (Hlg.)	hypo-
21	dak- ( <i>dakô</i> )	mega-
22	dagí-, dagít- ( <i>dagitab</i> )	electro-
23	dalúb- ( <i>dalúbhasà</i> )	-logy (with exceptions)
24	dam- ( <i>dami</i> )	poly-
25	danúm- (llk.)	hydro-
26	-das ( <i>landás</i> )	-ode (electrode)
27	-dayag	-hedron, surface
28	dí- ( <i>hindí</i> )	non-
29	-dinsol	-phyll
30	dípa- ( <i>hindí pá</i> )	pre-
31	du- ( <i>dutà</i> , Hlg.)	geo-
32	duha-, duhàn- (Bis.)	bi-, di-
33	-dulan ( <i>sukdulan</i> )	extreme position or degree
34	gantí-, gantím-	counter-
35	gi- ( <i>gilid</i> )	side of geometric plane figure
36	git- ( <i>gitnâ</i> )	mid-
37	halí-, halím, halín- ( <i>halip</i> )	dis-

38	hating-, hatím-, hatín- .....	fraction
39	hay-, -hay ( <i>buhay</i> ) .....	bio-
40	hig- ( <i>higit</i> ) .....	super-
41	init- .....	thermo-
42	isa- .....	mono-
43	laban- .....	anti-
44	labás- .....	external (static)
45	labáw- .....	meta-
46	lakdáw- .....	ultra-
47	lagum- .....	syn-
48	lapyá- .....	plano-
49	lik- .....	physico-
50	lihuk- .....	kinematic
51	lim- ( <i>limá</i> ) .....	penta-
52	lip- ( <i>lipi</i> ) .....	phylo-
53	lipat- .....	transfer
54	lit- ( <i>liít</i> ) .....	a small measure
55	loób- .....	internal (static)
56	luntí- .....	chloro-
57	luwás- .....	supra-, outgoing, extra-, external (dynamic)
58	mik- ( <i>mikmík</i> ) .....	micro-
59	múl-, múla- ( <i>múlaan</i> ) .....	elementary, proto-
60	mulí-, mulíng-, mulím-, mulín- .....	re-
61	-nayan ( <i>hanayan</i> ) .....	ending for the six principal sciences
62	ngibám- .....	transfer, trans-
63	nim- ( <i>anim</i> ) .....	hexa-
64	-nuran ( <i>sunuran</i> ) .....	order, sequence
65	pagká- .....	post-
66	palí- ( <i>palít</i> ) .....	re-
67	parí- .....	equal
68	pat- ( <i>apat</i> ) .....	tetra-
69	pit- ( <i>pito</i> ) .....	hepta-
70	pul- ( <i>pulù</i> ) .....	deca-
71	pulí- .....	vice-
72	salí- ( <i>salimuót</i> ) .....	complexity
73	sampaw- .....	over-
74	salin- .....	trans- (transfer)
75	sang-, sam-, san- .....	unity or totality
76	saríl- ( <i>sarili</i> ) .....	self-, auto-
77	sig- ( <i>isig</i> ) .....	mechano-
78	-sigan .....	-dynamics
79	-sihà .....	-gon
80	síng- .....	equality, sameness

81	sip- ( <i>isip</i> )	mathematico-
82	sukdúl-	hyper-, maximum
83	sug-	energetics
84	suga-	photo-
85	sulúd-	infra-, ingoing, intra-, internal (dynamic)
86	-sunuran	order, sequence
87	talá-	graph, table
88	-talà	astro-
89	taltág- ( <i>talatag</i> )	display, array
90	tat-, tatlú- ( <i>tatlo</i> )	tri-
91	tawíd-	cross-
92	tim- ( <i>itim</i> )	mela-
93	timug-	south-, austro-, australo-
94	ul-, ulnú- ( <i>ulnong</i> )	socio-
95	wal- ( <i>waló</i> )	octa-
96	-yô ( <i>anyô</i> )	-form

# ANG MGÁ PANLAPING MADALÁS GAMITIN

(The Frequently Used Affixes)

## MAKÁNGALAN

(Nominal)

- |                          |                                 |
|--------------------------|---------------------------------|
| 1 -ag-                   | 21 pagtag-                      |
| 2 -al-                   | 22 págka-                       |
| 3 -an (-han, -nan)       | 23 págka- ... -an (-han)        |
| 4 ka-                    | 24 pang- (pam-, pan-)           |
| 5 ka- ... -an (-han)     | 25 pani-                        |
| 6 hi-                    | 26 palá-                        |
| 7 -in (-hin, -nin), -in- | 27 palá- ... -an (-han)         |
| 8 mag-                   | 28 pati-                        |
| 9 mang- (mam-, man-)     | 29 pati- ... -an (-han)         |
| 10 -on, -non             | 30 sa-                          |
| 11 pa-                   | 31 sang- (sam-, san-)           |
| 12 pa- ... -an (-han)    | 32 sang- ... -an (-han)         |
| 13 paki-                 | 33 sangka- ... -an (-han)       |
| 14 paki- ... -an (-han)  | 34 tag-                         |
| 15 pag-                  | 35 tagá- (tagapág-, tagapágpa-) |
| 16 pag- ... -an (-han)   | 36 tagi-                        |
| 17 paghi-                | 37 tagu-                        |
| 18 pagma-                | 38 -um-                         |
| 19 pagpa-                |                                 |
| 20 pagsa-                |                                 |

## MAKÁDIWÀ

(Verbal)

- |             |              |
|-------------|--------------|
| 1 i-        | 12 magka-    |
| 2 in-, -in- | 13 magkang-  |
| 3 ipa-      | 14 maging-   |
| 4 ipaki-    | 15 magpa-    |
| 5 ipag-     |              |
| 6 ma-       | 16 magpaka-  |
| 7 mapa-     | 17 magpati-  |
| 8 mapasa-   | 18 magsa-    |
| 9 maka-     | 19 magsi-    |
| 10 maki-    | 20 mang-     |
| 11 mag-     | 21 paki-     |
|             | 22 um-, -um- |

## MAKÁURÌ

(Adjectival)

- |                      |                         |
|----------------------|-------------------------|
| 1 -an (-han)         | 11 maía-                |
| 2 ka-                | 12 mang-                |
| 3 ka- ... -an (-han) | 13 mapag-               |
| 4 ka- ... -in (-hin) | 14 mapang-              |
| 5 kay-               | 15 pa-                  |
| 6 -in                | 16 pa- ... -in (-hin)   |
| 7 ma-                | 17 palá-                |
| 8 ma- ... -an (-han) | 18 palá- ... -in (-hin) |
| 9 ma- ... -in (-hin) | 19 pang-                |
| 10 maka-             | 20 pinaka-              |

## MAKÁABAY

(Adverbial)

- |                        |           |
|------------------------|-----------|
| 1 ka-                  | 6 pa-     |
| 2 kapág-               | 7 sa-     |
| 3 di-                  | 8 samaka- |
| 4 ga- (gaga-, ganggá-) | 9 kina-   |
| 5 maka-                |           |

## MAKÁHALÍP

(Pronominal)

- 1 ka-

## MGÁ DAGLÁT SA BAHAGING PILIPINO

1	Pil. ....	Pilipino
2	Tag. ....	Tagalog
3	Mat. Tag. ....	Matandang Tagalog (galing sa NSL)
4	Bis. ....	Bisayà
5	Hlg. ....	Hiligaynon
6	Sgb. ....	Sugbuhanon
7	Bkl. ....	Bikol
8	Kpn. ....	Kapampangan
9	Ilk. ....	Ilúko
10	Wry. ....	Waray
11	Png. ....	Panggasinan
12	Mar. ....	Maranaw
13	Mgd. ....	Magindanaw
14	Ibg. ....	Ibanag
15	Ibt. ....	Ibatan
16	Ing. ....	Inglés
17	Kas. ....	Kastila
18	Mal. ....	Malay
19	Ins. ....	Insík
20	Nip. ....	Niponggo
21	Sk. ....	Sanskrito
22	Per. ....	Persano
23	Ar. ....	Arabe
24	Al. ....	Aleman
25	Pr. ....	Pranses
26	atb. ....	at ibá pá
27	hbw. ....	halímbawà
28	dgt. ....	daglat
29	isp. ....	isinasapian
30	hip. ....	hipno
31	bal. ....	balarilà
32	dbwn. ....	dalúbwikaán
33	ag. ....	aghám
34	sip. ....	sipnayan
35	sug. ....	sugnayan
36	kap. ....	kapnayan
37	hay. ....	haynayan
38	ul. ....	ulnayan
39	bat. ....	batnayan
40	pln. ....	pangngalan
41	pdw. ....	pandiwa

42	pri. ....	pang-uri
43	pby. ....	pang-abay
44	pky. ....	pantukoy
45	plp. ....	panghalip
46	pkl. ....	pang-ukol
47	ptg. ....	pangatnig
48	pkp. ....	pang-angkop
49	pdm. ....	pandamdám
50	Gro. ....	Gurò ( <i>Teacher</i> )
51	U/Gro. ....	Ulong-gurò ( <i>Head Teacher</i> )
52	P/Gro. ....	Punong-gurò ( <i>Principal</i> )
53	Dtro. ....	Dalúbturò ( <i>Instructor</i> )
54	Kwk. Dtro. ....	Kawaksíng Dalúbturò ( <i>Assistant Instructor</i> )
55	Dgro. ....	Dalúbgurò ( <i>Professor</i> )
56	Kwk. Dgro. ....	Kawaksíng Dalúbgurò ( <i>Assistant Professor</i> )
57	Kas. Dgro. ....	Kasamang Dalúbgurò ( <i>Associate Professor</i> )
58	Dpno. ....	Dalúbpunò ( <i>Dean</i> )
59	Kwk. Dpno. ....	Kawaksíng Dalúbpunò ( <i>Assistant Dean</i> )
60	Mggl. ....	Manananggol
61	Mggt. ....	Manggagamot
62	Plo. ....	Pangulo
63	Tgpló. ....	Tagápangulo
64	SWP	<b>Surian ng Wikang Pambansa:</b> <i>An English-Tagalog Dictionary</i> . Bureau of Printing: Maynila, 1960.
65	JVP	<b>Jose Villa Panganiban:</b> <i>Talahuluganang Pilipino-Inglés</i> . Kawanihan ng Palimbagan: Maynila, 1966.
66	NSL	<b>Juan de Noceda &amp; Pedro Sanlucar:</b> <i>Vocabulario de la Lengua Tagala</i> . Palimbagan ni Ramirez at Giraudier: Maynila, 1860.
67	PSL	<b>Pedro Serrano Laktaw:</b> <i>Diccionario Tagalog-Hispano</i> . Limbagan nina De Santos at Bernal: Maynila, 1914.
68	ETD	<b>Eusebio T. Daluz:</b> <i>Filipino-English Vocabulary</i> . Palimbagan ni Juan Martinez: Maynila, 1915.
69	LJE	<b>Leo James English:</b> <i>English-Tagalog Dictionary</i> . Department of Education: Manila, 1965.
70	PMA	<b>Philippine Medical Association:</b> <i>Medical Nomenclature in the Philippine National Language</i> . Journal of the PMA: Nobyembre 1953.
71	k/n	kasunò ng
72	s/n	sagitan ng (ni)

## MGÁ DAGLÁT SA BAHAGING INGLÉS

1	n. ....	noun
2	v. ....	verb
3	adj. ....	adjective
4	astron. ....	astronomy
5	arith. ....	arithmetic
6	math. ....	mathematics
7	geom. ....	geometry
8	hist. ....	history
9	pol. ....	politics
10	min. ....	mineralogy
11	bot. ....	botany
12	zool. ....	zoology
13	mech. ....	mechanics
14	bio. ....	biology
15	chem. ....	chemistry
16	socio. ....	sociology
17	anat. ....	anatomy
18	econ. ....	economics
19	anal. ....	analytics
20	ling. ....	linguistics
21	lit. ....	literature
22	psy. ....	psychology
23	elec. ....	electricity
24	phys. ....	physics
25	sc. ....	science
26	br. ....	branch
27	tech. ....	technical
28	org. ....	organization
29	ord. ....	ordinary
30	gen. ....	general
31	lim. ....	limited
32	pert. ....	pertaining
33	abbr. ....	abbreviation
34	inc. ....	incorporated
35	fig. ....	figure

# 2

## SIPNAYAN

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Lahatáng Sipnayang Katakawagán . . . . .	39
Palátangkasan . . . . .	43
Bilnuran . . . . .	45
Sukgisan . . . . .	49
Pánandaan . . . . .	54
Tatsíhaan . . . . .	59
Táyahan . . . . .	62
Paláúlatan . . . . .	65
Palátumbasan . . . . .	70
Mgá Ísahin ng Sukat at Sukod . . . . .	72
Mgá Sipnayang Panandâ . . . . .	73
Ang Abakadang Griyego Bilang Sipnayang Panandâ . . . . .	74

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## LAHATÁNG SIPNAYANING KATAWAGÁN

(General Terminology in Mathematics)

1	mathematics .....	sipnayan ( <i>isip</i> , <i>Bis.</i> , bilang + <i>hánayan</i> )
2	mathematical (adj., 1) .....	sipnayin
3	mathematical (adj., 2) .....	sipnayanin
4	mathematical worker .....	máninipnáy
5	mathematician .....	sipnayanon
6	theory of sets .....	palátangkasan
7	arithmetic .....	bilnuran ( <i>bilang</i> + <i>súnuran</i> )
8	geometry .....	sukgisan ( <i>sukat</i> + <i>hugis</i> + <i>-an</i> )
9	plane geometry .....	lapyáng sukgisan
10	solid geometry .....	siksíng sukgisan
11	algebra .....	pánandaan ( <i>pa-</i> + <i>tandâ</i> + <i>-an</i> )
12	trigonometry .....	tatsihaan ( <i>tatló</i> + <i>sihà</i> - <i>an</i> )
13	plane trigonometry .....	lapyáng tatsihaan
14	spherical trigonometry .....	timbúluging tatsihaan
15	calculus .....	táyahan ( <i>tayá</i> + <i>-han</i> )
16	differential calculus .....	tíngiring táyahan
17	integral calculus .....	láguming táyahan
18	statistics .....	paláúlatan
19	theory of equations .....	palátumbasan
20	higher mathematics .....	higsipnayan
21	computation .....	tuós, pagtutuós
22	compute .....	tuusín, magtuós
23	computer .....	panuós
24	accounting (sc.) .....	(dalúb) túusan
25	accounting (office) .....	pátuusán
26	accountancy (profession) .....	palátuusan
27	calculation .....	tayá, pagtayá
28	calculate .....	tayahín, magtayá
29	calculator .....	pantayá
30	rule .....	panuto
31	rule (drafting tool) .....	galod
32	slide rule .....	dulás-galod
33	abacus .....	bilangán
34	test (n.) .....	subok, pagsusubok
35	test (v.) .....	subúkin
36	examination .....	sulit, pagsusulit
37	give an examination on .....	sulitin sa

38	score .....	lubig
39	check (n.) .....	tsek
40	check (v.) .....	tsekín (may tuwirang layon), tsekán (may dífu-wirang layon), magtsèk (balintiyák)
41	check mark .....	gurlít-tsek
42	problem .....	lútasin
43	exercise .....	sánayin
44	known .....	alám
45	unknown .....	díalám
46	given .....	ibinigáy
47	to find .....	hanápin
48	quantity to be found .....	hánapin
49	prove (v.) .....	patunayan
50	to prove: .....	ang patutunayan:
51	statements .....	mgá saád
52	reasons .....	mgá matwíd
53	solve .....	lutasín
54	solution .....	kalutasán
55	answer .....	sagót
56	result .....	kinálabasán
57	definition .....	turing, katuringan
58	define (v.) .....	turingan
59	definite .....	turing
60	definitely .....	paturíng
61	indefinite .....	díturing
62	indefinitely .....	padíturing, dípaturíng
63	complete .....	ganáp
64	incomplete .....	díganáp
65	exact .....	singkád
66	inexact .....	dísingkad
67	error .....	malí, kamálian
68	correct (adj.) .....	wastô
69	incorrect .....	díwastô
70	correct (v.) .....	wastuhín, iwastô, magwastô
71	correction .....	sawastô, pagwawastô
72	right .....	tamà
73	wrong .....	dítamà
74	discrepancy .....	bisô
75	fault .....	sala, bisala
76	extreme (n.) .....	sukdulan
77	extreme (adj.) .....	sukdulin
78	deduction .....	awás, pag-aawás
79	deduct .....	awasín

80	single .....	inisá, ísahan
81	double .....	dinalawá, dálwahan
82	triple .....	tinatló, tatluhan
83	quadruple .....	inapat, ápatan
84	equal (adj.) .....	katumbás
85	unequal (adj.) .....	díkatumbás
86	equals, is equal to .....	tumbás, ay tumbás ng
87	unequal, is unequal to .....	dítumbás, ay dítumbás ng
88	infinity .....	awanggán ( <i>awán</i> + <i>hanggán</i> )
89	infinite (adj.) .....	awángganin
90	finite (adj.) .....	hanganin
91	unit .....	íshin
92	unity .....	ísá
93	inverse (adj.) .....	baligtád
94	inverse (n.) .....	kabaligtarán
95	invert (v.) .....	baligtarín
96	inversion .....	pagbaligtád
97	reverse (adj.) .....	tumbalik
98	reverse (n.) .....	katumbalikán
99	reverse (v.) .....	tumbalikín
100	reversible .....	tumbálikin
101	reversion .....	pagtumbalik
102	converse (adj.) .....	balianyô ( <i>balík</i> + <i>anyô</i> )
103	converse (n.) .....	kabalinyuán
104	conversely .....	pabalinyô
105	conversion .....	pagbalinyô
106	comparison .....	hambíng, paghahambíng
107	comparative .....	hambingin
108	comparatively .....	pahambíng
109	diagram .....	gúhitin
110	illustration .....	larawang-guhit
111	chart .....	taltaguhit ( <i>talatag-guhit</i> )
112	graph .....	talángguhit
113	table (of figure, data, etc.) .....	talay
114	tabulation .....	taláhanayan, tálayan
115	tabulate (v.) .....	talayin, italay
116	entry (in a math. table) .....	pasok (sa sipnayang talay)
117	mathematical method .....	sipnayang pamamaraán
118	model .....	tularán
119	mathematical model .....	sipnayang tularán
120	formula .....	sanyô ( <i>isáng anyô</i> )
121	empirical .....	másirin

<b>122</b>	empirical formula .....	másiring sanyô
<b>123</b>	mark .....	gurlít
<b>124</b>	sign .....	tandâ, panandâ
<b>125</b>	notation .....	halat
<b>126</b>	symbol .....	sagisag
<b>127</b>	denote .....	ihalat, halatin
<b>128</b>	amount .....	daghán (Sgb.)
<b>129</b>	value .....	halgá (halagá)
<b>130</b>	magnitude .....	dakíl (dakél, llk.)
<b>131</b>	direction .....	tungo
<b>132</b>	measurement .....	sukat
<b>133</b>	dimension .....	sukod (Bis.)
<b>134</b>	time .....	tión (Hlg.)
<b>135</b>	quantity .....	dami
<b>136</b>	standard quantity .....	pámantayang dami
<b>137</b>	quality .....	kaurián
<b>138</b>	characteristic .....	katángian
<b>139</b>	property .....	angkín, kaangkinán
<b>140</b>	common .....	pambálaná, bálaná
<b>141</b>	identical .....	kasiyángá
<b>142</b>	similar .....	hawíg, kahawíg
<b>143</b>	similarity .....	pagkákahawíg

# PALÁTANGKASAN

(Theory of Sets)

1	set .....	tangkás
2	theory of sets .....	palátangkasan
3	algebra of sets .....	pánandaan ng tangkás
4	element .....	mulhagì ( <i>mulaang bahagi</i> )
5	element of a set .....	mulhagì ng isáng tangkás
6	member .....	kabilang
7	member of a set .....	kabilang ng isáng tangkás
8	pair .....	kapid (Bis.)
9	ordered pair .....	kapid na ayós
10	finite number of elements .....	hangganing bilang ng mgá mulhagì
11	finite set .....	hangganing tangkás
12	infinite number of elements .....	awángganing bilang ng mgá mulhagì
13	infinite set .....	awángganing tangkás
14	set notation .....	halat ng tangkás
15	roster (publication) method .....	pamamaraáng patalay
16	rule (defining property) method .....	pamamaraáng paturíng
17	set of numbers .....	tangkás ng mgá bilang
18	set of positive integers .....	tangkás ng mgá tahás na buúmbilang
19	subset .....	kubtangkás
20	proper subset .....	angkóp na kubtangkás
21	unit set .....	ísahing tangkás
22	empty (null) set .....	waláng-lamáng tangkás
23	disjoint set .....	diugnáy na tangkás
24	equivalent .....	kahalgá
25	equivalence .....	pagkákahalgá
26	equivalent set .....	kahalgáng tangkás
27	universal set .....	lahatáng tangkás
28	complement of a set .....	kapunô ng isáng tangkás
29	one-to-one correspondence .....	sungkád (NSL) (isá-sa-isáng tugunan)
30	Venn Diagram .....	Gúhiting Venn
31	operation .....	sakilos
32	operation on sets .....	sakilos sa mgá tangkás
33	operator .....	pakilos
34	union of two sets .....	kaisahán ng dalawáng tangkás
35	intersection .....	bagtás
36	intersection of two sets .....	bagtás ng dalawáng tangkás
37	reflexive property .....	kaangkináng pabalík

38	symmetric property .....	kaangkináng parianyuín
39	transitive property .....	kaangkináng palipát
40	addition property .....	kaangkináng paragdag
41	multiplication property .....	kaangkináng parami
42	reflexivity .....	pagkápabalík
43	transitivity .....	pagkápaliipát
44	closed .....	piníd
45	closure property .....	kaangkináng piníd, kapinran
46	associative .....	ugnayin
47	associativity .....	pagkáúgnayin
48	associative law .....	ugnaying batás
49	commutative .....	pálitin
50	commutativity .....	pagkápálitin
51	commutative law .....	pálitin batás
52	distributive .....	báhagihín
53	distributivity .....	pagkábáhagihín
54	distributive law .....	báhagihing batás
55	inverse operation .....	kabaligtarang sakilos
56	additive inverse .....	dagdaging kabaligtaran
57	multiplicative inverse .....	páramihing kabaligtaran
58	truth set .....	tangkás ng katutohanan
59	solution .....	tangkás ng kalutasán

# BILNURAN

(Arithmetic)

1	arithmetic .....	bilnuran ( <i>bilang + súnuran</i> )
2	number .....	bilang
3	order .....	kasunrán
4	numbering .....	kabilangán, pagbibiláng
5	numeral .....	pambilang
6	numerically .....	pabílangin
7	numerology .....	palábilangán
8	digit .....	tambilang
9	operation .....	sakilos
10	operator .....	pakilos
11	four fundamental operations .....	apat na batayáng sakilos
12	addition .....	paláragdagan
13	subtraction .....	palábawasán
14	multiplication .....	paláramihán
15	division .....	paláhatián
16	add .....	magdagdág
17	subtract .....	magbawas
18	multiply .....	magparami
19	divide .....	maghati
20	sign .....	tandâ, panandâ
21	plus, + .....	dagdág
22	minus, - .....	bawas
23	plus or minus, ± .....	dagdág o bawas
24	times, × .....	maká
25	divided by, ÷ .....	hatiin sa
26	plus sign .....	tandáng dagdág
27	minus sign .....	tandáng bawas
28	80 plus or minus 5 .....	80 dagdág o bawas 5
29	positive sign .....	tandáng tahás
30	negative sign .....	tandáng balíng
31	sign of addition .....	tandâ ng paláragdagan
32	sign of subtraction .....	tandâ ng palábawasán
33	sign of multiplication .....	tandâ ng paláramihán
34	sign of division .....	tandâ ng paláhatián
35	five plus three .....	limá dagdág tatló
36	five minus three .....	limá bawas tatló
37	five times three .....	limá paramihin ng tatló, limá maká tatló

38	five divided by three .....	limá hatiin sa tatló
39	five over three .....	limá sa ibabaw ng tatló
40	carry (in long addition) .....	dalín (sa mahabang paláragdagan)
41	carry five .....	dalá limá
42	addend .....	panagdág
43	sum .....	dagup (llk.)
44	total .....	kabuuán
45	augend .....	dagdagin
46	deduct .....	awasín
47	minuend .....	báwasin
48	subtrahend .....	pamawas
49	difference .....	kaibhán
50	multiplicand .....	dámihin
51	multiplier .....	parami
52	product .....	bunga
53	dividend .....	hátin
54	divisor .....	pahatì
55	quotient .....	kahatián
56	remainder .....	labí
57	divisible .....	mahahatì
58	divisibility .....	pagkáhátin
59	part .....	hatì, kahatì, bahagi
60	one-half .....	kalahatì
61	classification of numbers .....	paláurián ng mgá bilang
62	counting number .....	bilang na panalatag
63	natural number .....	bilang na likás
64	even .....	tukól (SWP)
65	even number .....	bilang na tukól
66	odd .....	gansál (SWP)
67	odd number .....	bilang na gansál
68	cardinal number .....	bilang na paulát
69	ordinal number .....	bilang na panunód
70	abstract number .....	bilang na basal
71	rational number .....	bilang na tagwayin
72	irrational number .....	bilang na dítagwayin
73	imperfect number .....	bilang na balhág (NSL)
74	prime number .....	bilang na lantáy, bilang na balhò (Mat. Tag.)
75	composite number .....	bilang na pináglakíp
76	rectangular number .....	bilang na paritadlúngin
77	triangular number .....	bilang na tatsíhain
78	clock (modular*) arithmetic .....	bilnurang taknain
79	integer .....	buúmbilang
80	zero .....	awán, sero

<b>81</b>	the zero integer .....	ang awáng buúmbilang
<b>82</b>	consecutive integer .....	kasunod na buúmbilang
<b>83</b>	consecutive integers .....	magkákasunód na buúmbilang
<b>84</b>	consecutive even integers .....	magkákasunód na tukól na buúmbilang
<b>85</b>	consecutive odd integers .....	magkákasunód na gansál na buúmbilang
<b>86</b>	fraction .....	hatímbilang
<b>87</b>	fractional (adj.) .....	hatímbilangín
<b>88</b>	integral (adj., arith.) .....	buúmbilangín
<b>89</b>	fractional part .....	bahaging hatímbilangín
<b>90</b>	integral part .....	bahaging buúmbilangín
<b>91</b>	numerator .....	panakdâ
<b>92</b>	denominator .....	pamahagî
<b>93</b>	similar fractions .....	hawíg na hatímbilang
<b>94</b>	proper fraction .....	angkóp na hatímbilang
<b>95</b>	improper fraction .....	dí-angkóp na hatímbilang
<b>96</b>	compound fraction .....	langkaping hatímbilang
<b>97</b>	decimal fraction .....	sampung hatímbilang
<b>98</b>	decimal .....	sampung
<b>99</b>	decimal system .....	pánampung, sampung kaayusán
<b>100</b>	decimal notation .....	sampung halat
<b>101</b>	decade (ten of anything) .....	sinampû
<b>102</b>	decade (ten years) .....	pultaón
<b>103</b>	point .....	tuldók
<b>104</b>	decimal point .....	tuldók-sampung, sampung tuldók
<b>105</b>	change (n.) .....	bayló (Bis.)
<b>106</b>	change (v.) .....	bayluhín, bayluhán, bumayló
<b>107</b>	change a decimal into fraction .....	bayluhín ang isáng sampung sa hatímbilang
<b>108</b>	convert .....	balinyuín
<b>109</b>	simplify .....	payakín
<b>110</b>	simplification .....	pagpayák
<b>111</b>	term .....	takay
<b>112</b>	lowest term .....	pinakámababang takay
<b>113</b>	simplest term .....	pinakápayák na takay
<b>114</b>	multiple (n.) .....	kaparami
<b>115</b>	multiple of 6 .....	kaparami ng 6
<b>116</b>	multiple (adj.) .....	dinami, maramihán
<b>117</b>	least common multiple (LCM) .....	pinakámaliít na lahatáng kaparami (PLK)
<b>118</b>	least common denominator (LCD) .....	pinakámaliít na lahatáng pamahagî (PLP)
<b>119</b>	reciprocal (n.) .....	kabaligtád
<b>120</b>	ratio .....	tagwáy (Mat. Tag.)
<b>121</b>	proportion .....	hagwáy (Mat. Tag.)
<b>122</b>	cross multiplication .....	laktawang paláramihán

<b>123</b>	means .....	mgá tamtaman
<b>124</b>	extremes .....	mgá sukduan
<b>125</b>	cancel .....	payiin
<b>126</b>	cancellation (math.) .....	payì, pagpayì
<b>127</b>	rate .....	kabilsán
<b>128</b>	rate formula .....	sanyô ng kabilsán
<b>129</b>	time .....	tiôn (Hlg.)
<b>130</b>	time formula .....	sanyô ng tiôn
<b>131</b>	distance .....	agwát
<b>132</b>	distance formula .....	sanyô ng agwát
<b>133</b>	percent .....	bahagdán
<b>134</b>	percentage .....	kabahagdanán
<b>135</b>	rate of interest .....	kabilsán ng tubò
<b>136</b>	compound interest .....	lambalang tubò
<b>137</b>	compounded interest .....	linambál na tubò
<b>138</b>	term (period of time) .....	taning
<b>139</b>	reduction .....	maliw, pagmaliw
<b>140</b>	reduce .....	maliwín
<b>141</b>	be reduced .....	magmaliw
<b>142</b>	reduce to lowest terms .....	maliwín sa pinakámababang takay
<b>143</b>	associative .....	ugnayin
<b>144</b>	commutative .....	pálitin
<b>145</b>	distributive .....	báhagihín
<b>146</b>	significant figure .....	makahulugáng tambilang
<b>147</b>	rounding off .....	pagbilog
<b>148</b>	shortcut .....	laktód (Hlg.)
<b>149</b>	shortcut method of addition .....	pamamaraáng laktód sa paláragdagan
<b>150</b>	multiplication table .....	talay ng paláramihán
<b>151</b>	measurement .....	sukat
<b>152</b>	dimension .....	sukod (Bis.)
<b>153</b>	scale (of measurements) .....	talásukatán, talásukurán
<b>154</b>	scale (of comparative sizes) .....	találakihan
<b>155</b>	weight .....	bigát
<b>156</b>	average weight .....	balasak na bigát
<b>157</b>	average cost .....	balasak na halagá
<b>158</b>	modulus operator .....	kawagsáng pakilos*
<b>159</b>	modulo .....	kawagsán*
<b>160</b>	20 modulo 8 .....	20 kawagsán 8*

\*Isinama ng may-sipì bilang makábagong katawagán

## SUKGISAN

(Geometry)

1	geometry .....	sukgisan ( <i>sukat + hugis + -an</i> )
2	plane .....	lapyâ
3	solid .....	siksín
4	plane geometry .....	lapyáng sukgisán
5	solid geometry .....	siksíng sukgisán
6	analytic geometry .....	súriing sukgisán
7	spherical geometry .....	timbúluging sukgisán
8	geometrical interpretation .....	sukgisáníng pakahulugán
9	confirmation .....	patutoó
10	proof .....	patunay
11	axiom .....	batlain ( <i>batayán + símulain</i> )
12	principle .....	símulain
13	fundamental principle .....	batayáng símulain
14	postulate .....	batayáng palagáy
15	theory .....	hunà
16	hypothesis .....	pálagayin
17	theorem .....	húnain
18	premise .....	kahunaan
19	corollary .....	hugpungin
20	conclusion .....	pasyahin
21	point .....	tuldók
22	representation of a point .....	talihalat ng isáng tuldók
23	end point .....	dulong tuldók
24	isolated point .....	bukód na tuldók
25	midpoint .....	gituldók
26	line .....	guhit
27	broken line .....	guhit na balí-balí
28	curve .....	kilô
29	curved line .....	guhit na kilô
30	segment .....	putol
31	line segment .....	putol ng guhit
32	length of a segment .....	habà ng putol
33	directed line segment .....	itinungong putol ng guhit
34	midpoint of a line segment .....	gituldók ng isáng putol ng guhit
35	prolongation of a line .....	padayon ng isáng guhit
36	prolong a line .....	ipadayon ang isáng guhit
37	draw a line .....	gumuhit, iguhit

38	construction	pagguhit
39	construct a figure	gumuhit ng isáng laraw
40	involute	sultág ( <i>sulong + latag</i> )
41	evolute	balisultág
42	collinear	magkaguhit, kaguhit
43	coincident	magkatuntóng, katuntóng
44	degree	antás
45	scale (of degrees)	taláantasan
46	protractor	panihà (panukat ng sihà)
47	ray	sinag
48	angle	sihà (Mat. Tag.)
49	vertex of an angle	bagtasan ng isáng sihà
50	vertex angle	sihà ng bagtasan, tuktuking sihà
51	acute angle	sihang kipót
52	obtuse angle	sihang bikâ
53	oblique angle	sihang talibás
54	right angle	sihang tadtóng
55	straight angle	sihang ladtlád
56	reflex angle	sihang pabalík
57	base angle	sihang takad
58	included angle	sihang ipít
59	alternate angles	sihang salisí
60	adjacent angles	sihang tabí
61	opposite angles	sihang tapát
62	complementary angles	sihang kapunô
63	supplementary angles	sihang kaladtlád
64	complement (of angles)	kapunô
65	supplement (of angles)	kaladtlád
66	design	antangan (Mar.)
67	pattern (model)	hulwaran, tularán
68	shape	hugis
69	form	anyô
70	frame	bastagan
71	figure	laraw
72	plane figure	lapyáng laraw
73	plane closed figure	lapyáng laraw na piníd
74	polygon	damsihà (maraming sihà)
75	triangle (polygon)	tatsihà, tatsulók
76	tetragon (quadrangle)	patsihà
77	quadrilateral	patgillid
78	trapezoid	tagigapáy ( <i>tagibáng + agapáy</i> )
79	parallelogram	parigapáy
80	rhomboid	tagihilís

81	rectangle .....	paritadlóng, parihabâ
82	rhombus .....	tagisukát
83	square .....	parisukát
84	pentagon .....	limsihà
85	hexagon .....	nimsihà
86	heptagon .....	pitsihà
87	octagon .....	walsihà
88	nonagon .....	samsihà
89	decagon .....	pulsihà ( <i>pulu + sihà</i> )
90	distance .....	agwát
91	length .....	habà
92	width .....	lapad
93	height .....	taás
94	altitude .....	tayog
95	base .....	takad
96	side .....	gilid
97	included side .....	gilid na ipít
98	adjacent side .....	gilid na tabí
99	opposite side .....	gilid na tapát
100	diagonal .....	hilís
101	hypotenuse .....	gilís ( <i>gilid na hilís</i> )
102	slope .....	hilig
103	vertex of a triangle .....	tuktók ng isáng tatsihà
104	vertex angle of a triangle .....	tuktuking sihà ng isáng tatsihà
105	perpendicular .....	tadlóng
106	perpendicularity .....	katadlungán
107	parallel .....	agapáy
108	parallelism .....	kaagapayán
109	parallel lines .....	mgá guhit na agapáy
110	symmetrical .....	parianyuín ( <i>paris + anyô + -in</i> )
111	assymetrical .....	díparianyuín, tabingî
112	intersection (act of intersecting) .....	bagtás, pagbagtás
113	intersection (point of) .....	bagtasan
114	intersect (v.) .....	bumagtás, bagtasín
115	area .....	dawak (NSL)
116	space .....	lawak
117	perimeter .....	gikop ( <i>gilid + salikop</i> )
118	equilateral (adj.) .....	parigilíd
119	equidistant .....	pariagwát
120	equiangular .....	parisihâ
121	congruent .....	magkalapat, kalapat
122	similar .....	hawíg, kahawíg

123	right triangle .....	tatsihang tatlóng, tatlungíng tatsihà
124	isosceles triangle .....	kaduhaing tatsihà
125	equilateral triangle .....	parigíliring tatsihà
126	equiangular triangle .....	parisihaing tatsihà
127	scalene triangle .....	tagibáng na tatsihà
128	spherical triangle .....	timbúluging tatsihà
129	oblique triangle .....	talibás na tatsihà
130	circle .....	bilog
131	semi-circle .....	hatímbilog
132	circumference .....	tikop
133	semi-circumference .....	hatíntikop
134	center .....	tungâ (Bis.)
135	diameter .....	bantód (NSL)
136	radius .....	lihit ( <i>lihang guhit</i> )
137	tangent (line) .....	dikít
138	secant (line) .....	tangab (NSL)
139	chord (geom.) .....	bagtíng
140	segment (of a circle) .....	hiwà (ng isáng bilog)
141	sector (of a circle) .....	lihà (ng isáng bilog)
142	oval .....	habilog ( <i>habáng bilog</i> )
143	ellipse .....	duyog (Mat. Tag.)
144	disc .....	dalipay (NSL)
145	solid figure .....	siksíng laraw
146	one-dimensional figure .....	iisahing sukod na laraw
147	two-dimensional figure .....	dadalwahing sukod na laraw
148	perspective (3-dim. effect) .....	sawang (NSL)
149	bulk .....	bikíl (NSL)
150	volume .....	buók (Bis.)
151	globe .....	hilihid (NSL)
152	sphere .....	timbulog (Bis.)
153	spherical .....	timbulóg
154	hemisphere .....	hatímbulog
155	cone .....	talulô
156	envelope .....	bilot
157	section (geom.) .....	tapyás
158	parallel sections .....	agapáy na mgá tapyás
159	midsection .....	gitapyás
160	truncated .....	tinapyás
161	oblique .....	talibás
162	cube (geom. solid) .....	binuók
163	cubic .....	búukin
164	pyramid .....	tagilô
165	pyramidal .....	tágiluín

166	prism .....	balimbíng
167	triangular prism .....	tatsihaing balimbíng
168	hexagonal prism .....	nimsíhaing balimbíng
169	prismatic .....	binalimbíng
170	cylinder .....	bumbóng
171	cylindrical .....	binumbóng, bumbungin
172	spiral .....	balukay
173	helix .....	pilipit
174	helical .....	pilipít, pílipitín
175	helicoid .....	malápilipit
176	surface .....	dayag
177	surface (as contrasted to the reverse side) ...	karayagán
178	reverse surface .....	kabaligtaráng dayag
179	subsurface .....	kubdayag
180	polyhedron .....	damdayag ( <i>dami + dayag</i> )
181	tetrahedron .....	patdayag
182	pentahedron .....	limdayag
183	hexahedron .....	nimdayag
184	heptahedron .....	pitdayag
185	octahedron .....	waldayag
186	nonahedron .....	samdayag
187	decahedron .....	puldayag
188	T-square .....	paripáng galod
189	French curve .....	kiluáng galod
190	Triangle (drafting tool) .....	tatsihang galod
191	vertical .....	tayô*
192	vertically .....	patayô*
193	horizontal .....	higâ*
194	horizontally .....	pahigâ*
195	eccentricity .....	kaluwastúngain**
196	conic sections .....	mgá tapyás ng talulô, mgá talulohíng tapyás**

\*Isinama ng may-sipì bilang karagdagang katawagán

\*\*Isinama ng may-sipì bilang makábagong katawagán

# PÁNANDAAN

(Algebra)

1	algebra	(dalúb) pánandaan ( <i>pa-</i> + <i>tandâ</i> + <i>-an</i> )
2	algebraic expression	pánandaing pahayag
3	degree	antás
4	term	takay
5	monomial	isakay ( <i>isá</i> + <i>takay</i> )
6	binomial	duhakay
7	trinomial	talukay
8	polynomial	damikay
9	degree of a term	antás ng isáng takay
10	degree of a polynomial	antás ng isáng damikay
11	number	bilang
12	classification of numbers	paláurián ng mgá bilang
13	abstract number	bilang na basal
14	real number	bilang na tunay
15	imaginary number	bilang na guní, gunímbilang
16	complex number	bilang na hugnáy
17	integer	buúmbilang
18	positive	tahás
19	positive integer	tahás na buúmbilang
20	negative	balíng
21	negative integer	balíng na buúmbilang
22	signed number	maytandáng bilang
23	like signs	magkatulad na tandâ
24	unlike signs	dímagkatulad na tandâ
25	rule of signs	panuto sa mgá tandâ
26	absolute	wagás
27	absolute value	halgáng wagás
28	decimal	sampung
29	terminating decimal	sampung maytardâ
30	repeating (periodic) decimal	sampung úlitin
31	nonrepeating decimal	sampung díúlitin
32	factor (n.)	kabuô
33	factor (v.)	bungkagin
34	factorial	búuin
35	coefficient	katuwáng
36	factored form	binungkág na anyô
37	multiple (n.)	kaparami

38	multiple (adj.)	dinami, máramihán
39	least common multiple (LCM)	pinakámaliít na lahatáng kaparami (PLK)
40	least common denominator (LCD)	pinakámaliít na lahatáng pamahagi (PLP)
41	constant (n.)	lágiin
42	constant (adj.)	lágian
43	constant quantity	lángiang dami
44	similar quantities	mgá hawíg na dami
45	variable (n.)	áligin ( <i>alig</i> , NSL)
46	variable (adj.)	aligán
47	variable quantity	aligáng dami
48	independent variable	sárliníng áligin
49	dependent variable	dísarilíníng áligin
50	complex variable	hugnaying áligin
51	function (math.)	kabisà ( <i>kasamang bisà</i> )
52	function (purpose)	laán
53	range	abot
54	range of a function	abot ng isáng kabisà
55	domain	sakláv
56	domain of a function	sakláv ng isáng kabisà
57	linear function	túwiring kabisà
58	exponential function	páulitíng kabisà
59	transcendental function	igpawing kabisà
60	equation	tumbasan
61	linear equation	túwiring tumbasan
62	quadratic equation	dáwaking tumbasan (dinawak na tumbasan)
63	cubic equation	búuking tumbasan
64	quartic equation	ápating tumbasan
65	conditional (piecewise*) equation	pinasubaliang tumbasan
66	simultaneous (math.)	magkalutás
67	simultaneity	pagkámagkalutás
68	simultaneous equations	magkákakalutás na tumbasan
69	identical equations	mgá kasiyáng tumbasan
70	exponential equation	páulitíng tumbasan
71	equality	katumbasán
72	inequality	díkatumbasán
73	equivalence	pagkákahalgá
74	equivalent	kahalgá
75	identity	kasiyangaán
76	identical	kasiyá
77	identically equal	pasiyangaíng katumbás
78	associative	ugnayin
79	associative law	ugnaying batás
80	commutative	pálitin

<b>81</b>	commutative law .....	páliting batás
<b>82</b>	distributive .....	báhagihín
<b>83</b>	distributive law .....	báhagihíng batás
<b>84</b>	addition property .....	kaangkináng paragdag
<b>85</b>	multiplication property .....	kaangkináng parami
<b>86</b>	reflexive property .....	kaangkináng pabalík
<b>87</b>	symmetric property .....	kaangkináng parianyô
<b>88</b>	transitive property .....	kaangkináng palipát
<b>89</b>	cross multiplication .....	laktawang paláramihan
<b>90</b>	transposition .....	paglilipat
<b>91</b>	transpose .....	ilipat
<b>92</b>	representation .....	talihalat
<b>93</b>	substitute .....	hulip
<b>94</b>	substitution .....	paghuhulip
<b>95</b>	to satisfy an equation .....	lapatan ang isáng tumbasan
<b>96</b>	truth set .....	tangkas ng katutohanan
<b>97</b>	solution .....	tangkas ng kalutasán
<b>98</b>	simple root .....	payák na ugát
<b>99</b>	double root .....	dalwahang ugát
<b>100</b>	distinct root .....	magkaibáng ugát
<b>101</b>	synthetic division .....	daglating paghahati
<b>102</b>	graph .....	talángguhit
<b>103</b>	graphical solution .....	talángguhiting kalutasán
<b>104</b>	graphical method .....	talángguhiting pamamaraán
<b>105</b>	origin .....	múlaan
<b>106</b>	axis .....	taluhog ( <i>tuhog</i> )
<b>107</b>	horizontal axis .....	higáng taluhog
<b>108</b>	vertical axis .....	tayóng taluhog
<b>109</b>	<i>x</i> -axis .....	taluhog- <i>x</i>
<b>110</b>	<i>y</i> -axis .....	taluhog- <i>y</i>
<b>111</b>	Plot (n.) .....	tuntón
<b>112</b>	plot (v.) .....	tuntunín
<b>113</b>	point .....	tuldók
<b>114</b>	abscissa .....	higawat ( <i>higâ + agwát</i> )
<b>115</b>	ordinate .....	tayuwat ( <i>tayô + agwát</i> )
<b>116</b>	<i>x</i> -coordinate .....	katayuwat- <i>x</i>
<b>117</b>	<i>y</i> -coordinate .....	katayuwat- <i>y</i>
<b>118</b>	coordinate .....	katayuwat
<b>119</b>	coordinate system .....	kaayusáng katayuwat, táyuwatán
<b>120</b>	rectangular coordinate system .....	paritadlungíng kaayusáng katayuwat
<b>121</b>	Cartesian coordinate system .....	Dekarthíng kaayusáng katayuwat
<b>122</b>	rectangular coordinates .....	mgá paritadlungíng katayuwat

123	Cartesian coordinates .....	mgá Dekarthíng katayuwat
124	involution .....	palambál, kasultagán*
125	evolution (algebra) .....	hiugat, kabalisultagán*
126	base .....	takad
127	exponent .....	paulit
128	power .....	lambál
129	raised to the power .....	parami sa lambál
130	square (the second power) .....	parirami
131	cube (the third power) .....	talurami
132	$x$ squared .....	$x$ -dinawak
133	$x$ cubed .....	$x$ -binuók
134	$x$ to the fourth power .....	$x$ sa iká-4 na lambál
135	perfect .....	himpít (Bis.)
136	perfect square .....	himpít na parirami
137	completing the square .....	pagbubuô sa parirami
138	difference of two squares .....	kaibhán ng dalawáng parirami
139	difference of two cubes .....	kaibhán ng dalawáng talurami
140	difference of like powers .....	kaibhán ng magkatulad na lambál
141	root .....	ugát
142	radical .....	pang-ugát
143	radical sign (notation) .....	tandáng pang-ugát (halat)
144	index of a radical .....	kaugatán
145	extraction of roots .....	pahugot sa ugát
146	radicand .....	úgatin
147	extract the 6 <sup>th</sup> root of 729 .....	ugatín hanggáng iká-6 ang 729
148	square root .....	pariugát
149	cube root .....	talugát
150	table of powers and roots .....	talay ng mgá lambál at ugát
151	determinant .....	taliyák ( <i>tiyák</i> )
152	element (of a determinant) .....	múlhagì (ng isáng taliyák)
153	row .....	hanay
154	column .....	tudlíng
155	numerator determinant .....	panakdáng taliyák
156	denominator determinant .....	pamahaging taliyák
157	expansion of the determinant .....	buklád ng taliyák
158	discriminant .....	talangí ( <i>tangí</i> )
159	progression .....	panisulong ( <i>pani</i> + <i>sulong</i> )
160	arithmetic progression .....	bilhuring panisulong
161	geometric progression .....	sukgising panisulong
162	series (math.) .....	dalayráy ( <i>daydáy</i> )
163	mathematical induction .....	sipnaying pamuurán ( <i>pa-</i> + <i>buód</i> + <i>-an</i> )
164	permutation .....	pámálitán
165	combination (math.) .....	pálákipán

<b>166</b>	permutation of $n$ different things taken $r$ at a time $({}_nP_r)$ .....	pámálitán ng $n$ na ibá-ibáng bagay maká $r$ bawa't tión $({}_nM_r)$
<b>167</b>	permutation of $n$ things taken all at a time ...	pámálitán ng $n$ na bagay maká lahá't bawa't tión
<b>168</b>	combination of $n$ things taken $r$ at a time $({}_nC_r)$ .....	pálákipán ng $n$ na bagay maká $r$ bawa't tión $({}_nL_r)$
<b>169</b>	probability .....	kalagmitán (Bis.)
<b>170</b>	<i>a priori</i> probability .....	katwiraning kalagmitán
<b>171</b>	<i>a posteriori</i> probability .....	masiraning kalagmitán
<b>172</b>	conditional probability .....	pinasubaliang kalagmitán
<b>173</b>	occurrence of an event .....	pagkátupád ng isáng pangyayari
<b>174</b>	non-occurrence of an event .....	dípagkátupád ng isáng pangyayari
<b>175</b>	certainty .....	katiyakán
<b>176</b>	uncertainty .....	díkatiyakán
<b>177</b>	independent events .....	mgá sáriliníng pangyayari
<b>178</b>	dependent events .....	mgá dísariliníng pangyayari
<b>179</b>	compound events .....	mgá langkaping pangyayari
<b>180</b>	mutually exclusive events .....	mgá tambínging dílangkaping pangyayari
<b>181</b>	non-mutually exclusive events .....	mgá dí'tambínging dílangkaping pangyayari
<b>182</b>	conditional .....	pasumala, pinasubalian*
<b>183</b>	amplitude .....	hagkis
<b>184</b>	$x$ raised to the power of $y$ .....	$x$ parami sa lambál ng $y^{**}$
<b>185</b>	transcendental number .....	bilang na igpaw***

\*Isinama ng may-sipì bilang makábagong katawagán

\*\*Isinama ng may-sipì ayon sa salin ng salitáng "raised to the power"

\*\*\*Isinama ng may-sipì ayon sa salin ng salitáng "transcendental function"

# TATSÍHAAN

(Trigonometry)

1	trigonometry .....	tatsíhaan ( <i>tatló + siha + -an</i> )
2	triangle (trigon) .....	tatsihà, tatsulók
3	plane .....	lapyâ
4	spherical .....	timbulóg, timbúugin
5	plane trigonometry .....	lapyáng tatsíhaan
6	spherical trigonometry .....	timbúluging tatsíhaan
7	origin .....	múlaan
8	axis .....	taluhog ( <i>tuhog</i> )
9	horizontal axis .....	higáng taluhog
10	vertical axis .....	tayóng taluhog
11	<i>x</i> -axis .....	taluhog- <i>x</i>
12	<i>y</i> -axis .....	taluhog- <i>y</i>
13	plot (n.) .....	tuntón
14	plot (v.) .....	tuntunín
15	point .....	tuldók
16	abscissa .....	higawat ( <i>higâ + agwát</i> )
17	ordinate .....	tayuwat ( <i>tayô + agwát</i> )
18	<i>x</i> -coordinate .....	katayuwat- <i>x</i>
19	<i>y</i> -coordinate .....	katayuwat- <i>y</i>
20	coordinate .....	katayuwat
21	coordinate system .....	kaayusáng katayuwat, táyuwatán
22	rectangular coordinate system .....	paritadlungíng kaayusáng katayuwat
23	Cartesian coordinate system .....	Dekarthíng kaayusáng katayuwat
24	rectangular coordinates .....	mgá paritadlungíng katayuwat
25	Cartesian coordinates .....	mgá Dekarthíng katayuwat
26	quadrant .....	kapatán
27	first quadrant .....	unang kapatán
28	second quadrant .....	ikalawáng kapatán
29	third quadrant .....	ikatlóng kapatán
30	fourth quadrant .....	ikáapat na kapatán
31	vector .....	tugano ( <i>tungo + gaanó</i> )
32	radius vector .....	tuganong lihit
33	angle .....	sihà
34	directed angle .....	sihang itinungo
35	initial side (of an angle) .....	pamuláng gilid (ng isáng sihà)
36	terminal side (of an angle) .....	pahulíng gilid (ng isáng sihà)
37	rotation .....	inog

38	clockwise rotation	pataknaang inog
39	counterclockwise rotation	balitaknaang inog
40	amount of rotation	daghán ng inog
41	protractor	panihà (panukat ng sihà)
42	vertex (of an angle)	bagtasan (ng isáng sihà)
43	scale (of degrees)	taláantasan
44	unit of angle	ísahin ng sihà
45	degree	antás
46	minute	sandalí
47	second	saglít
48	arc	bantók ( <i>balantók</i> )
49	degree of an arc	antás ng isáng bantók
50	minute of an arc	sandalí ng isáng bantók
51	second of an arc	saglít ng isáng bantók
52	circle	bilog
53	unit circle	ísahing bilog
54	radian	radyan
55	radian measure	radyang sukat
56	function (math.)	kabisà ( <i>kasamang bisà</i> )
57	trigonometric function	tatsíhaning kabisà
58	inverse trigonometric function	baligtád na tatsíhaning kabisà
59	reciprocal function	kabaligtaráng kabisà
60	cofunction	kakabisà
61	natural function	likás na kabisà
62	circular function	biluging kabisà
63	identity	kasiyangaán
64	trigonometric identity	tatsíhaning kasiyangaán
65	fundamental identity	batayáng kasiyangaán
66	trigonometric equation	tatsíhaning tumbasan
67	trigonometric form	tatsíhaning anyô
68	ratio	tagwáy (NSL)
69	reciprocal (n.)	kabaligtád
70	sine, sin	sinwáy ( <i>sin</i> + tagwáy), sin
71	cosine, cos	kasinwáy, kas
72	tangent, tan	tanwáy ( <i>tan</i> + tagwáy), tan
73	cotangent, cot	katanwáy, kat
74	secant, sec	sekwáy ( <i>sek</i> + tagwáy), sek
75	cosecant, csc	kasekwáy, ksk
76	wave	alon
77	curve	kilô
78	sine wave	sinwaying alon
79	since curve	sinwaying kilô
80	sinusoidal	sinwayin

<b>81</b>	logarithm .....	logpaulit
<b>82</b>	antilogarithm .....	gantflogpaulit
<b>83</b>	base (of a logarithm) .....	takad (ng isáng logpaulit)
<b>84</b>	characteristic (of a logarithm) .....	buurmbahagi (ng isáng logpaulit)
<b>85</b>	mantissa (of a logarithm) .....	sampuambahagi (ng isáng logpaulit)
<b>86</b>	common logarithm .....	karaniwang logpaulit
<b>87</b>	natural logarithm .....	likás na logpaulit
<b>88</b>	Briggsian logarithm .....	Brigsíng logpaulit
<b>89</b>	Napierian logarithm .....	Napieríng logpaulit
<b>90</b>	table of logarithms .....	talay ng mgá logpaulit
<b>91</b>	interpolate .....	isalingit
<b>92</b>	extrapolate .....	idukláy
<b>93</b>	logarithmic .....	logpáulitín
<b>94</b>	logarithmic function .....	logpáulitíng kabisà
<b>95</b>	computation by logarithm .....	pagtutuós sagitan ng logpaulit
<b>96</b>	solution of right triangles .....	kalutasán ng tatsíhang tadróng
<b>97</b>	angle of inclination .....	sihà ng hiligtaás
<b>98</b>	angle of depression .....	sihà ng hiligbabâ
<b>99</b>	reduction formula .....	sanyóng pangmaliw
<b>100</b>	sine law .....	sinwaying batás
<b>101</b>	cosine law .....	kasinwaying batás
<b>102</b>	simplification formula .....	sanyóng pamayák
<b>103</b>	addition formula .....	sanyóng paragdag
<b>104</b>	Napier's analogies .....	mgá sawangkî ni Napier

# TÁYAHAN

(Calculus)

1	calculus	táyahan ( <i>tayá</i> + <i>-han</i> )
2	differential (n.)	tingíd (PSL, pag-ibá, pagtiyák)
3	differential (adj.)	tíngirin
4	differential calculus	tíngiring táyahan
5	differentiate (v.)	tingirín
6	differentiation	pagtingíd
7	differentiable	matítingíd
8	differential symbol	tíngiring tandâ
9	differential notation	tíngiring halat
10	differential equation	tíngiring tumbasan
11	integral (n.) (calculus)	lagom
12	integral (adj.) (calculus)	lágumin
13	integral calculus	láguming táyahan
14	integrate (v.)	lagumin
15	integration	paglagom
16	integrable	malalagom
17	integral symbol	láguming tandâ
18	integral notation	láguming halat
19	integrand	lálagumin
20	definite	turing
21	indefinite	díturing
22	definite integral	turing na lagom
23	indefinite integral	díturing na lagom
24	double integration	dalwahang paglagom
25	triple integration	tatluhang paglagom
26	multiple integration	máramiháng paglagom
27	increment	dugang (Bis.)
28	derivative	hangò
29	first derivative	unang hangò
30	derivative of a function	hangò ng isáng kabisà
31	derivative with respect to $x$	hangò tungod sa $x$
32	change (n.)	bayló (Bis.)
33	change (v.)	bayluhín, bayluhán, bumayló
34	changeable	bayluhin
35	rate	kabilsán
36	change of rate	bayló ng kabilsán
37	rate of change	kabilsán ng bayló

38	rate of increase .....	kabilsán ng pagdaragdág, kabilsán ng pagdugang
39	constant rate .....	lángiang kabilsán
40	variable rate .....	áligang kabilsán
41	relative (adj.) .....	matugnáy ( <i>matugón + maugnáy</i> )
42	relativity .....	katugnayán
43	related rates .....	magkatugnáy na kabilsán
44	approach (v.) .....	lumapit
45	instant .....	iglap
46	instantaneous .....	iglapin
47	instantaneous value .....	iglaping halgá
48	function .....	kabisà ( <i>kasamang bisà</i> )
49	linear function .....	túwiring kabisà
50	repeating function .....	úliting kabisà
51	exponential function .....	páuliting kabisà
52	trigonometric function .....	tatsíhaning kabisà
53	inverse trigonometric function .....	baligtád na tatsíhaning kabisà
54	implicit function .....	hiwatíg na kabisà
55	explicit function .....	lantád na kabisà
56	parametric .....	sadyánsukatin
57	boundary .....	hanganan
58	domain .....	saklaw
59	domain of a function .....	saklaw ng isáng kabisà
60	range of a function .....	abót ng isáng kabisà
61	continuity .....	katuluyán
62	continue indefinitely .....	magpatuloy ng dípaturíng
63	approximation .....	dapít
64	approximate (v.) .....	padapitín, pumadapít
65	approximate (adj.) .....	madapít
66	first approximation .....	unang dapít
67	current approximation .....	kasalukuyang dapít
68	new approximation .....	bagong dapít
69	succession of approximations .....	súnuran ng mgá dapít
70	sequence .....	datig
71	element of sequence .....	kadatig ( <i>kasamang datig</i> ), múlhagi ng datig
72	limit, lím .....	hanggán, hgn
73	limit of a sequence .....	hanggán ng isáng datig
74	sequence of partial sums .....	datig ng mgá bahaging dagup
75	iteration .....	pagliwán (Bis.)
76	set of marks .....	tangkás ng mgá gurlít
77	operation .....	sakilos
78	operator .....	pakilos
79	summation (operator) .....	pagdagup (pakilos)

<b>80</b>	summation (quantity) .....	kadagupan
<b>81</b>	series (math.) .....	dalayráy ( <i>daydáy</i> )
<b>82</b>	expansion .....	buklád
<b>83</b>	converge .....	maglapít
<b>84</b>	convergent .....	palapít
<b>85</b>	convergent series .....	palapít na dalayráy
<b>86</b>	diverge .....	maglayô
<b>87</b>	divergent .....	palayô
<b>88</b>	divergent series .....	palayóng dalayráy
<b>89</b>	infinite series .....	awágganing dalayráy
<b>90</b>	comparison test .....	hambinging subok
<b>91</b>	plot (n.) .....	tuntón
<b>92</b>	plot (v.) .....	tuntunín
<b>93</b>	curve plotting .....	pagtuntón ng kilô
<b>94</b>	curve tracing .....	pagbakás ng kilô
<b>95</b>	curvature .....	kakiluán
<b>96</b>	Mean Value Theorem .....	Húnain ng Tamtaming Halgá
<b>97</b>	maximum, maxima (n.) .....	higdulan ( <i>higit + sukdulan</i> )
<b>98</b>	maximum (adj). .....	higdulin
<b>99</b>	minimum, minima (n.) .....	kubdulan ( <i>kubós + sukdulan</i> )
<b>100</b>	minimum (adj). .....	kubdulin
<b>101</b>	area under a curve .....	dawak sa ilalim ng isáng kilô
<b>102</b>	chain rule .....	patanikaláng panuto
<b>103</b>	trapezoidal rule .....	tagigapaying panuto
<b>104</b>	scalar .....	bilangin
<b>105</b>	vector .....	tugano ( <i>tungo + gaanó</i> )
<b>106</b>	vector analysis .....	tuganhíng surian
<b>107</b>	tensor .....	katuganhán ( <i>katuganuhan</i> )
<b>108</b>	tensor calculus .....	katuganhaning táyahan
<b>109</b>	quaternion .....	pamapat
<b>110</b>	quaternions .....	pámapatán
<b>111</b>	situs .....	lúnaan
<b>112</b>	analysis situs .....	súriang lúnaanin

# PALÁÚLATAN

(Statistics)

1	statistics .....	paláúlatan
2	statistics (collection of data) .....	kaulatan
3	datum, data .....	malak
4	collection of data .....	pangangalap ng malak
5	presentation of data .....	paglalahad ng malak
6	analysis of data .....	pagsusuñ ng malak
7	interpretation of data .....	pakahulugán sa malak
8	evaluation of data .....	paghahalgá sa malak
9	raw data .....	hiláw na malak
10	continuous data .....	túluyang malak
11	discontinuous data .....	dítúluyang malak
12	discrete data .....	hiwaláy na malak
13	empirical data .....	másiring malak
14	observation .....	masíd
15	sources of data .....	mgá batis ng malak
16	primary source .....	pángunahíng batis
17	secondary source .....	pangalwahing batis
18	census .....	lahatámbilang, sensus
19	survey .....	siyasig ( <i>siyasat</i> , PSL)
20	enumeration .....	sabilang
21	enumerate .....	sabilangin
22	schedule .....	palátánungan
23	statistical (adj.) .....	paláulatnin
24	questionnaire .....	talátánungan
25	registration .....	satalâ
26	register .....	satalaín
27	table .....	talay
28	tabulation .....	taláhanayan, tálayan
29	tabulate (v.) .....	talayin, italay
30	inductive statistics .....	paláúlatang pabuód
31	deductive statistics .....	paláúlatang pasaklâw
32	population (of things in general) .....	sámbagayán
33	finite population .....	hanganing sámbagayán
34	infinite population .....	awángganing sámbagayán
35	sample .....	halímbagay ( <i>halímbawang bagay</i> )
36	random .....	alisagâ
37	random choice .....	alisagáng pili

38	random sample	alisagáng halímbagay
39	systematic sample	máayusing halímbagay
40	sampling	híhalímbagay
41	random sampling	alisagáng híhalímbagay
42	systematic sampling	máayusing híhalímbagay
43	statistic	himalak ( <i>hi-</i> + <i>malak</i> )
44	parameter	sadyánsukat
45	array	tugdáy (Bis.)
46	<i>x</i> -array, <i>y</i> -array	tugdáy- <i>x</i> , tugdáy- <i>y</i>
47	variable (n.)	áligin (Mat. Tag., NSL)
48	random variable	alisagáng áligin
49	variance	alig
50	covariance	kaalig
51	variation	kaaligán
52	variability	pagkáaligín
53	variate	paalig
54	grouped variate	nilipong paalig
55	ungrouped variate	dínilipong paalig
56	class	urì
57	class interval	patláng ng urì
58	class width	lapad ng urì
59	open class	bukás na urì
60	frequency	dalás
61	relative frequency	matugnaying dalás
62	cumulative frequency	maragdaging dalás
63	cumulative frequency less than	maragdaging dalás kubús sa
64	cumulative frequency more than	maragdaging dalás higít sa
65	cumulative relative frequency	maragdaging matugnaying dalás
66	distribution	pamámahagì
67	open-end distribution	bukás-dulong pamámahagì
68	frequency distribution	pamámahagì ng dalás
69	relative frequency distribution	pamámahagì ng matugnaying dalás
70	class limit	hanggán ng urì
71	class boundary	hangganan ng urì
72	lower (upper) class limit	pang-ibabáng (pang-itaás na) hanggán ng urì
73	lower (upper) class boundary	pang-ibabáng (pang-itaás na) hangganan ng urì
74	midpoint, midmark, mid- <i>x</i>	gituldók, gitgurlít, git- <i>x</i>
75	frequency polygon	damsihà ng dalás
76	frequency curve	kilô ng dalás
77	histogram	taládálasan
78	ogive	hatímbantok

79	ogive curve .....	hatímbantuking kilô
80	relative frequency polygon .....	matugnaying damsihà ng dalás
81	relative frequency histogram .....	matugnaying taládálasan
82	summation (operator) .....	pagdagup (pakilos)
83	summation (quantity) .....	kadagupan (dami)
84	average .....	balasak
85	measure of central tendency .....	sukat ng pagitnáng túnguhin
86	mean .....	tamtaman
87	simple mean .....	payák na tamtaman
88	mean value .....	tamtaming halgá
89	arithmetic mean .....	bilnuring tamtaman
90	guessed mean .....	hulang tamtaman
91	assumed mean .....	ipinalagáy na tamtaman
92	arithmetic mean of extremes .....	bilnuring tamtaman ng mgá sukdulan
93	weighted arithmetic mean .....	binigatáng bilnuring tamtaman
94	harmonic mean .....	súwatuhíng tamtaman
95	geometric mean .....	sukgising tamtaman
96	quadratic mean .....	dáwaking tamtaman
97	root mean square .....	ugát ng tamtaming parirami
98	median .....	gitnaan
99	median class .....	gitnaing urì
100	mode .....	palasák
101	crude mode .....	hiláw na palasák
102	modal class .....	pálasaking urì
103	quantile .....	karamhín
104	quartile .....	kápatin
105	decile .....	kasampuin
106	percentile .....	kabahagdanin
107	dispersion .....	kakalatán
108	absolute dispersion .....	wagás na kakalatán
109	relative dispersion .....	matugnaying kakalatán
110	measure of dispersion .....	sukat ng kakalatán
111	range .....	abot
112	deviation .....	kaliwasán, liwás
113	quartile deviation .....	kápatíng liwás
114	mean absolute deviation .....	tamtaming wagás na liwás
115	standard deviation .....	pámantayang liwás
116	Charlier's Check .....	Ang Pagsubok-Charlier
117	Sheppard's Correction .....	Ang Pagtumpák-Sheppard
118	grouping error .....	panlilipong mali
119	standard error .....	pámantayang mali
120	probable error .....	malagmít na mali

121	absolute error .....	wagás na mali
122	relative error .....	matugnáy na mali
123	coefficient of variation .....	katuwáng ng kaaligán
124	quartile coefficient of dispersion .....	kápating katuwáng ng kakalátán
125	statistical estimate .....	paláulatíng tantiyá
126	reliability of the estimate .....	katiwalaán ng tantiyá
127	skewness .....	pagkákiwál
128	positive (negative) skewness .....	tahás (balíng) na pagkákiwál
129	measure of skewness .....	sukat ng pagkákiwál
130	kurtosis .....	umbók
131	norm (standard, model) .....	daniw (pámantayan, ulirán)
132	normal (tech.) .....	dániwin
133	normal (ordinary) .....	karaniwan
134	normal distribution, Gaussian distribution.....	dániwing pamámahagi, pamámahaging Gauss
135	symmetrical distribution .....	parianyuíng pamámahagi
136	moment .....	sigwát ( <i>isig</i> + <i>agwát</i> )
137	significance .....	katuturán
138	confidence level .....	kapantayan ng tiwalá
139	time-series .....	tíuning dalayráy
140	secular trend .....	mátagalang tunguhin
141	secular variation .....	mátagalang kaaligán
142	base year .....	takad na taón, taóng takad
143	given year .....	ibinigáy na taón, taóng ibinigáy
144	index .....	panurò
145	index number .....	bilnurò ( <i>bilang</i> + <i>turò</i> )
146	simple index number .....	payák na bilnurò
147	unweighted index number .....	díbinigatang bilnurò
148	price index number .....	bilnurò ng bilí
149	relatives .....	mgá katugnáy ( <i>katugón</i> + <i>kaugnáy</i> )
150	aggregative relatives .....	mgá malápiing katugnáy
151	simple aggregative relatives.....	mgá payák na malápiing katugnáy
152	simple average of relatives .....	payák na balasak ng mgá katugnáy
153	price relatives .....	mgá katugnáy ng bilí
154	arithmetic mean of the price relatives .....	bilnuring tamtaman ng mgá katugnáy ng bilí
155	median of the price relatives .....	gitnaan ng mgá katugnáy ng bilí
156	weighting .....	pagbibigát
157	weighted index number .....	binigatang bilnurò
158	weighted aggregative relative index number .....	binigatang malápiing katugnáy na bilnurò
159	base period .....	takad na puktól
160	given period .....	ibinigáy na puktól
161	weighted by base period quantities .....	binigatán ng takad-puktól na dami
162	weighted by given period quantities .....	binigatán na bigáy-puktól na dami

<b>163</b>	Fisher's ideal index number .....	uliráng bilnurò ni Fisher
<b>164</b>	correlation .....	satugný ( <i>sa-</i> + <i>tugón</i> + <i>ugnáy</i> )
<b>165</b>	regression .....	balitugný
<b>166</b>	scatter diagram .....	pakalát na gúhitin
<b>167</b>	dot diagram .....	tuldukáng gúhitin
<b>168</b>	method of least squares .....	pamamaraán ng kábabaang parirami
<b>169</b>	permutation .....	pámálitán
<b>170</b>	combination .....	pálákipan
<b>171</b>	permutation of $n$ different things taken $r$ at a time $({}_nP_r)$ .....	pámálitán ng $n$ na ibá-ibáng bagay maká $r$ bawa't tión $({}_nM_r)$
<b>172</b>	permutation of $n$ things taken all at a time ...	pámálitán ng $n$ na bagay maká lahat bawa't tión
<b>173</b>	combination of $n$ things taken $r$ at a time $({}_nC_r)$ .....	pálákipan ng $n$ na bagay maká $r$ bawa't tión $({}_nL_r)$
<b>174</b>	factorial .....	búuin
<b>175</b>	probability .....	kalagmitán (Bis.)
<b>176</b>	<i>a priori</i> probability .....	katwiraning kalagmitán
<b>177</b>	<i>a posteriori</i> probability .....	masiraning kalagmitán
<b>178</b>	conditional probability .....	pinasubaliang kalagmitán
<b>179</b>	occurrence of an event .....	pagkátupád ng isáng pangyayari
<b>180</b>	non-occurrence of an event .....	dípagkátupád ng isáng pangyayari
<b>181</b>	certainty .....	katiyakán
<b>182</b>	uncertainty .....	díkatiyakán
<b>183</b>	independent events .....	mgá sárliníng pangyayari
<b>184</b>	dependent events .....	mgá dísariliníng pangyayari
<b>185</b>	compound events .....	mgá langkaping pangyayari
<b>186</b>	mutually exclusive events .....	mgá tambinging dílangkaping pangyayari
<b>187</b>	non-mutually exclusive events .....	mgá dítamblinging dílangkaping pangyayari
<b>188</b>	probability function .....	kalagmitaning kabisà
<b>189</b>	probability distribution .....	kalagmitaning pamámahagì
<b>190</b>	binomial distribution .....	duhakaying pamámahagì
<b>191</b>	Poisson distribution .....	Puwasonhíng pamámahagì, pamámahaging Poisson
<b>192</b>	mathematical expectation .....	sipnaying kaasahan

# PALÁTUMBASAN

(Theory of Equations)

1	theory of equations .....	palátumbasan
2	real number .....	bilang na tunay
3	imaginary number .....	bilang na guní, gunímbilang
4	pure imaginary number .....	tagnás na gunímbilang
5	complex number .....	bilang na hugnáy
6	conjugate .....	katápatan
7	conjugate imaginary .....	katápatang gunímbilang
8	modulus .....	kawagsán ( <i>kawagasán</i> )
9	amplitude .....	hagkís
10	trigonometric form .....	anyóng tatsíhanin
11	graphical representation of complex number	talángguhiting talihalat ng bilang na hugnáy
12	De Moivre's Theorem .....	Húnaing De Moivre
13	linear equation .....	túwiring tumbasan
14	quadratic equation .....	dáwaking tumbasan
15	cubic equation .....	búking tumbasan
16	quartic equation .....	apating tumbasan
17	completing the square .....	pagbubuô sa parirami
18	discriminant .....	talangì ( <i>tangi</i> )
19	identically equal .....	pasiyangaing katumbás
20	factored form .....	binungkág na anyô
21	linear factors .....	mgá túwiring kabuô
22	real polynomial .....	tunay na damikay
23	identical polynomials .....	mgá kasiyangaing damikay
24	Remainder Theorem .....	Húnain ng Labí
25	Factor Theorem .....	Húnain ng Kabuô
26	synthetic division .....	daglating paghahati
27	distinct root .....	magkaibáng ugát
28	real root .....	tunay na ugát
29	imaginary root .....	gunímbilanging ugát
30	integral root .....	buúmbilanging ugát
31	rational root .....	tagwaying ugát
32	multiple root .....	máramiháng ugát
33	simple root .....	payák na ugát
34	double root .....	dalwahang ugát
35	triple root .....	tatluhang ugát
36	fourfold root .....	ápatang ugát
37	multifold root .....	dámihang ugát

38	best method for integral roots	pinakámabuting pamamaraán para sa buúm-bilanging ugát
39	mathematical induction	sipnaying pámuurán
40	elementary symmetric functions	mgá pámulaang parianyuín na kabisà
41	Cardan's formula	sanyô ni Cardan
42	Ferrari's method	pamamaraáng Ferrari
43	depressed equation	ibanabáng tumbasan
44	reduced cubic equation	binawasang búuking tumbasan
45	resolvent cubic equation	lútasing búuking tumbasan
46	transformation	halinyô ( <i>halin</i> + <i>anyô</i> )
47	transform (v.)	halinyuín
48	transformed	hinalinyô
49	transformed equation	hinalinyóng tumbasan
50	trigonometric equation	tatsihaning tumbasan
51	simultaneous equation	magkakalutás na tumbasan
52	matrix	baskagan
53	rank of a matrix	kaantasán ng isáng baskagan
54	order of a matrix	pariantás ng isáng baskagan
55	square matrix	parisukat na baskagan
56	rectangular matrix	paritadlungíng baskagan
57	diagonal matrix	hílising baskagan
58	orthogonal matrix	matadlungíng baskagan
59	unit matrix	ísahing baskagan
60	symmetric matrix	parianyuíng baskagan
61	antisymmetric matrix	laban-parianyuíng baskagan
62	augmented matrix	dinagdagáng baskagan
63	scalar matrix	bílanging baskagan
64	determinant	taliyák ( <i>tiyák</i> )
65	element (of a determinant)	múlhagì (ng isáng taliyák)
66	row	hanay
67	column	tudlíng
68	numerator determinant	panakdáng taliyák
69	denominator determinant	pamahaging taliyák
70	expansion of the determinant	buklád ng taliyák
71	minor (of a determinant)	kalít-an (ng isáng taliyák)
72	complementary minor	kapúnuang kalít-an
73	cofactor	kakabuô
74	sufficiently small (large) numerically	pabilanging sapát na malíit (malakí)
75	variation of signs	pag-alig ng mgá tandâ
76	Descarte's Rule of Signs	Ang Panuto sa mgá Tandâ ni Dekart
77	Rolle's Theorem	Húnain ni Rolle
78	Sturm's Division Process	Pahating Pamamaraán ni Sturm
79	Sturm's function	kabisà ni Sturm

## MGÁ ÍSAHIN NG SUKAT AT SUKOD

*(Units of Measurements and Dimensions)*

1	milli- .....	kalibo-
2	centi- .....	kadan-
3	deci- .....	kapul-
4	kilo- .....	libo-
5	micro- .....	mik-
6	inch .....	dali
7	foot .....	talampakan
8	yard .....	yarda
9	meter .....	metro, panukat
10	fathom .....	dipá
11	cubit (a measure of length) .....	kubit
12	mile .....	milya
13	gram .....	gramo
14	pound .....	libra
15	board feet .....	tablahing talampakan

## MGÁ SIPNAYANING PANANDÁ

*(Signs Used in Mathematics)*

1	parentheses .....	$()$ .....	panaklóng
2	brackets .....	$[]$ .....	panalikop
3	braces .....	$\{\}$ .....	pamukód
4	and so on .....	$\dots$ .....	at pagayon
5	is an element (a member) of .....	$\in$ .....	ay mulhagi (kabilang) ng
6	is not an element (a member) of .....	$\notin$ .....	ay dímulhagi (díkabilang) ng
7	equals, is equal to .....	$=$ .....	tumbás, ay tumbás ng
8	unequal, is not equal to .....	$\neq$ .....	dítumbás, ay dítumbás ng
9	is similar to .....	$\sim$ .....	ay kahawíg ng
10	is approximately equal to .....	$\approx$ .....	ay padapitíng katumbás ng
11	is congruent to .....	$\cong$ .....	ay kalapat ng
12	is identically equal to .....	$\equiv$ .....	ay pasiyangaing katumbás ng
13	is equivalent to .....	$\leftrightarrow$ .....	ay kahalgá ng
14	is greater than .....	$>$ .....	ay higit sa
15	is less than .....	$<$ .....	ay kubús sa
16	is not greater than .....	$\not>$ .....	ay díhigit sa
17	is not less than .....	$\not<$ .....	ay díkubús sa
18	is greater than or equal to .....	$\geq$ .....	ay higit sa o katumbás ng
19	is less than or equal to .....	$\leq$ .....	ay kubús sa o katumbás ng
20	is not greater than or equal to .....	$\not\geq$ .....	ay díhigit sa o katumbás ng
21	is not less than or equal to .....	$\not\leq$ .....	ay díkubús sa o katumbás ng
22	universal set .....	$U$ .....	lahatáng tangkás
23	is a subset of .....	$\subseteq$ .....	ay kubtangkás ng
24	is not a subset of .....	$\not\subseteq$ .....	ay díkubtangkás ng
25	is a proper subset of .....	$\subset$ .....	ay angkóp na kubtangkás ng
26	is not a proper subset of .....	$\not\subset$ .....	ay dí-angkóp na kubtangkás ng
27	is a superset of .....	$\supseteq$ .....	ay higtangkás ng
28	is not a superset of .....	$\not\supseteq$ .....	ay díhigtangkás ng
29	is a proper superset of .....	$\supset$ .....	ay angkóp na higtangkás ng
30	is not a proper superset of .....	$\not\supset$ .....	ay dí-angkóp na higtangkás ng
31	the cardinal number of set $A$ .....	$(A)$ .....	ang bilang na paulát ng tangkás $A$
32	union of two sets .....	$\cup$ .....	kaisahán ng dalawáng tangkás
33	intersection of two sets .....	$\cap$ .....	bagtasan ng dalawáng tangkás
34	ordered pair $a, b$ .....	$(a, b)$ .....	kapid na ayós $a, b$
35	cross product of $A$ and $B$ ("A cross B") .....	$A \times B$ .....	laktáw-bunga ng $A$ at $B$ ("A laktáw $B$ ")
36	dot product of $A$ and $B$ ("A dot B") .....	$A \cdot B$ .....	tuldók-bunga ng $A$ at $B$ ("A tuldók $B$ ")

# ANG ABAKADANG GRIYEGO BILANG SIPNAYANING PANANDÂ

*(The Greek Alphabet as Mathematical Signs)*

1	alpha .....	.... $A\alpha$ ....	alpa
2	beta .....	.... $B\beta$ ....	beta
3	gamma .....	.... $\Gamma\gamma$ ....	gama
4	delta .....	.... $\Delta\delta$ ....	delta
5	epsilon .....	.... $E\epsilon\epsilon$ ....	épsilon
6	zeta .....	.... $Z\zeta$ ....	seta
7	eta .....	.... $H\eta$ ....	eta
8	theta .....	.... $\Theta\theta\vartheta$ ....	teta
9	iota .....	.... $I\iota$ ....	iyota
10	kappa .....	.... $K\kappa$ ....	kapa
11	lambda .....	.... $\Lambda\lambda$ ....	lamda
12	mu .....	.... $M\mu$ ....	mu
13	nu .....	.... $N\nu$ ....	nu
14	xi .....	.... $\Xi\xi$ ....	ksi
15	omicron .....	.... $O\omicron$ ....	ómikron
16	pi .....	.... $\Pi\pi$ ....	pay
17	rho .....	.... $\rho\rho\rho$ ....	ro
18	sigma .....	.... $\Sigma\sigma$ ....	sigma
19	tau .....	.... $T\tau$ ....	taw
20	upsilon .....	.... $\Upsilon\nu$ ....	úpsilon
21	phi .....	.... $\Phi\phi\phi$ ....	pi
22	chi .....	.... $X\chi$ ....	kay
23	psi .....	.... $\Psi\psi$ ....	psay
24	omega .....	.... $\Omega\omega$ ....	omega

# 3

## SUGNAYAN

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Lahatáng Sugnayang Katawagán . . . . .	76
Tígilan . . . . .	78
Ísigan . . . . .	80
Ínitan . . . . .	82
Túnugan . . . . .	84
Súgaan . . . . .	88
Balnian . . . . .	92
Dágitbán . . . . .	94
Dágsikán . . . . .	97
Búturán . . . . .	99
Mgá Ísahin ng Sukat at Sukod . . . . .	102
Mahahalgáng Sugnayang Lágiin . . . . .	104
Dalúbtáalan . . . . .	105
Dalúbdútaan . . . . .	109
Sigmuan . . . . .	113
Agbarugan . . . . .	119

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## LAHATÁNG SUGNAYANING KATAWAGÁN

(General Terminology in Physics)

1	physics, the physical sciences .....	sugnayan (kusog + hánayan)
2	physical (adj., 1) .....	sugnayin
3	physical (adj., 2) .....	sugnayanin
4	physics worker, asst. physicist .....	manunugnay
5	physicist .....	sugnayanon
6	natural .....	likás
7	unnatural .....	dílikás
8	supernatural .....	higlikás ( <i>higít</i> na <i>likás</i> )
9	mechanics .....	(dalúb) sigwasan ( <i>isig</i> + <i>lawas</i> + <i>-an</i> )
10	mechanism (system) .....	sigmuan
11	hydraulics .....	danúmsigwasan
12	pneumatics .....	buhagsigwasan
13	statics .....	tígilan
14	hydrostatics .....	danúmtígilan
15	aerostatics .....	buhágtígilan, hangintígilan
16	electrostatics .....	dagitígilan
17	dynamics .....	ísigan
18	hydrodynamics .....	danúm-ísigan
19	aerodynamics .....	buhágsigan, hanginsigan
20	electrodynamics .....	dagitsigan
21	kinematics .....	línukan ( <i>lihok</i> , Hlg.)
22	kinetics .....	kílusan
23	the science of heat, thermics .....	(dalúb)-ínitan
24	thermodynamics .....	ínitsigan
25	thermoelectricity .....	ínitdagitbán
26	thermochemistry .....	ínitkapnayan
27	acoustics .....	túnugan
28	optics .....	(dalúb) súgaan
29	magnetism (sc.) .....	balnian
30	electricity (sc.) .....	(dalúb) dagitbán
31	electronics .....	dágisikán
32	atomics, atomic physics .....	(dalúb) mulpikan
33	nucleonics, nuclear physics .....	(dalúb) búturán
34	astronomy .....	dalúbtáalan
35	geology .....	(palá) dútaan
36	metaphysics .....	labawsugnayan ( <i>labaw</i> , Bis.)
37	technics, techniques .....	aghimò ( <i>aghám</i> + <i>himò</i> )

38	technology	aghímuan
39	technical	aghímuin
40	technologist	mang-aaghímuan
41	system	kaayusán
42	function (mech.)	taán
43	efficient	mataláb
44	efficiency	katalbán ( <i>katalabán</i> )
45	space (math.)	lawak
46	space (physical)	kalawakán
47	state	himtáng, kahimtangán (Hlg.)
48	characteristic	katangian
49	condition	kalágayan
50	property	angkín, kaangkinán
51	peculiarity	kakanyahán
52	position	katáyuan
53	place	lunán
54	amount	daghán (Sgb.)
55	value	halgá ( <i>halagá</i> )
56	equivalent	kahalgá
57	quantity	dami
58	quality	kaurián
59	time	tión (Hlg.)
60	rest	tigil
61	stop	hintô
62	point (abstract)	tungos
63	distance	agwát
64	direction	tungo
65	duration	lawig
66	body (of inorganic things, generally)	lawas (ETD)

# TÍGILAN

(Statics)

1	statics	tígilan
2	static (adj.)	tigíl
3	strength	lakás
4	force (vector quantity)	isig (NSL)
5	component force	kabuóng isig
6	resultant force	kinálabasáng isig
7	energy (capacity to do work)	kusóg (Bis., Bkl.)
8	vector	tugano ( <i>tungo + gaanó</i> )
9	vector quantity	tuganong dami
10	scalar	bílangin
11	scalar quantity	bílanging dami
12	magnitude	dakíl ( <i>dakol, llk.</i> )
13	moment	sigwát ( <i>isig + agwát</i> )
14	equilibrium	katiningan
15	torque	habyóg
16	intensity	tindí
17	malleable	pukpukin
18	nonmalleable	dípukpukin
19	malleability	pagkápukpukin
20	elastic	igkasin
21	inelastic	dīgkasin
22	elasticity	pagkáigkasin
23	flexible	hútukin
24	inflexible	dīhútukin
25	flexibility	pagkáhútukin
26	strain	banat
27	stress	sidhî
28	modulus	litdami ( <i>liít + dami</i> )
29	expansion	buklád
30	contraction	daginsín
31	compression	tipíl
32	weight (property)	bigát
33	mass	bugát (Bis.)
34	matter	butáng (Bis.)
35	fluid	lapuyot
36	solid	siksín
37	liquid	danúm

38	gas .....	buhág
39	vapor .....	singáw
40	state .....	himtáng, kahimtangán (Hlg.)
41	solid state .....	siksining himtáng
42	liquid state .....	dánuming himtáng
43	gaseous state .....	búhaging himtáng
44	porous .....	malábugà
45	porosity .....	kabugaan
46	rigid (adj.) .....	tigambáy (Mat. Tag.)
47	plastic (adj.) .....	makaláw (Mat. Tag.)
48	specific weight .....	hambinging bigát
49	(weight) density .....	(bígating) kasiksikán
50	mass density .....	búgating kasiksikán
51	pressure .....	diín
52	isobars .....	guhit ng kadiín
53	molecule .....	múlatil ( <i>múlaang butil</i> )
54	diffusion (of molecules, chem.) .....	panunuót
55	diffuse .....	manuót
56	atmosphere .....	kaanginán
57	atmospheric pressure .....	kaanginaning diín

# ÍSIGAN

(Dynamics)

1	mechanics .....	(dalúb) sigwasan ( <i>isig + lawas + -an</i> )
2	dynamics (1) .....	ísigan
3	dynamics (gen. sense) (2) .....	paláisigan
4	kinematics .....	lìhukan ( <i>lihok</i> , Hlg.)
5	kinetics .....	kílusan
6	power (rate of doing work) .....	isog (Bis., Bkl.)
7	work (product of force and distance) .....	himò (Bis.)
8	inert .....	matigál
9	inertia .....	tigál
10	momentum .....	dagsâ
11	impulse (phys.) .....	dantáy
12	speed .....	bilís
13	velocity .....	tulin
14	instant of time .....	taknâ
15	period of time .....	takdâ
16	displacement (linear) .....	galáw
17	acceleration .....	darasig
18	accelerate .....	darasigin
19	deceleration .....	hidarasig
20	decelerate .....	hidarasigin
21	negative acceleration .....	balidasarisig
22	motion (pure movement, independent of force) .....	lihok (Hlg.)
23	motion (produced by force) .....	kilos
24	force (vector quantity) .....	isig (NSL)
25	application of force .....	tuón ng isig
26	action .....	bilos ( <i>bisà + kilos</i> )
27	reaction .....	balibilos ( <i>balik + bisà + kilos</i> )
28	uniform (pert. to events) .....	maligo (NSL)
29	uniform motion .....	maligong kilos, maligong lihok
30	uniform velocity .....	maligong tulin
31	uniform acceleration .....	maligong darasig
32	friction .....	kiskís
33	isostasy .....	katigalán, katiglán
34	isobar .....	kadiín
35	thrust .....	sikad
36	spring .....	paigkás, balintáng

37	recoil .....	balisikad
38	vibration .....	kiníg
39	wave (mech.) .....	alon
40	channel (mech.) .....	alunán
41	gyroscope .....	halintigál
42	centripetal force .....	gítisig ( <i>pagitnáng isig</i> )
43	centrifugal force .....	basisig ( <i>palabás na isig</i> )
44	energy (capacity to do work) .....	kusóg (Bis., Bkl.)
45	kinetic .....	kílusin
46	kinetic energy .....	kílusing kusóg
47	potential energy .....	bíniting kusóg
48	gravity .....	dagsín (Ilk.)
49	gravitation .....	karagsinán
50	gravitational .....	dagsinin
51	attraction .....	higom

# ÍNITAN

(*Thermics*)

1	the science of heat, thermics .....	(dalúb)-ínitan
2	the technology of heat .....	aghímuan ng init
3	heat .....	init
4	heat energy, thermal energy .....	íniting kusóg
5	sentient heat .....	lantád na init
6	latent heat .....	lingíd na init
7	fusion (mech.) .....	pamumuók
8	heat of fusion .....	init ng pamumuók
9	vapor .....	singáw
10	vaporization .....	sasingáw
11	heat of vaporization .....	init ng sasingáw
12	heat content .....	íniting lamán
13	heat capacity .....	íniting lulan
14	specific heat .....	hambinging init
15	isotherm .....	kakaintán
16	isothermal .....	kakaintanin
17	enthalpy .....	sanginit
18	entropy .....	malikusóg ( <i>maliw + kusóg</i> )
19	thermometer .....	ínitsukod
20	thermostat .....	ínitsupil
21	thermoelectricity .....	ínitdagitbán
22	thermochemistry .....	ínitkapnayan
23	thermodynamics .....	ínitsigan
24	temperature .....	kaintán
25	absolute temperature .....	wagás na kaintán
26	absolute zero temperature .....	wagás na awáng kaintán
27	Centigrade scale .....	súkurang Sentigrado
28	Fahrenheit scale .....	súkurang Párenhait
29	absolute scale .....	súkurang wagás
30	Kelvin scale .....	súkurang Kelbin
31	British Thermal Unit (BTU) .....	Britanhíng Íniting Ísahin (BII)
32	law of heat exchange .....	batás ng pálitang-init
33	mechanical equivalent of heat .....	sigmuing kahalgá ng init
34	boiling point .....	tungos ng pagkulô
35	melting point .....	tungos ng pagtunaw
36	critical temperature .....	maselang kaintán
37	process (internal action) .....	sabisà

<b>38</b>	isothermal process .....	kakaintáng sabisà
<b>39</b>	adiabatic process .....	kainiting sabisà
<b>40</b>	constant volume process .....	kabúuking sabisà
<b>41</b>	constant pressure process .....	kadīning sabisà
<b>42</b>	equilibrium vapor pressure .....	katiningáng singawing díin
<b>43</b>	coefficient .....	katuwáng
<b>44</b>	coefficient of linear expansion.....	katuwáng ng túwiring buklád
<b>45</b>	coefficient of area expansion .....	katuwáng ng dáwaking buklád
<b>46</b>	coefficient of volume expansion.....	katuwáng ng búuking buklád
<b>47</b>	first law of thermodynamics .....	unang batás ng ínitsigan
<b>48</b>	second law of thermodynamics .....	ikalawáng batás ng ínitsigan
<b>49</b>	heat sink .....	tapunáng-init
<b>50</b>	heat source .....	batis ng init
<b>51</b>	radiation (not radioactive) .....	dagalat
<b>52</b>	external combustion engine .....	labás-liyabing likhisog
<b>53</b>	internal combustion engine .....	loób-liyabing likhisog
<b>54</b>	Carnot cycle .....	salikop Karno
<b>55</b>	heat pump .....	sigláy-init
<b>56</b>	refrigeration .....	pálamigan

# TÚNUGAN

(Acoustics)

1	sound (gen. sense) .....	tunóg
2	acoustics .....	túnugan
3	acoustical .....	túnuganin
4	noise .....	ingay
5	voice (speech sound) .....	tinig
6	phonology .....	(dalúb) tínigan
7	phoneme .....	multinig
8	morpheme .....	multuran
9	phonetics .....	palátínigan
10	phonics .....	sanaytínigan
11	phonemics .....	multínigan
12	morphemics .....	multúranan
13	vibration .....	kiníg
14	quake, tremor, intense and low-frequency vibration .....	yaníg
15	sonics .....	dalúbnugan ( <i>dalúb + tunugan</i> )
16	ultrasonics .....	lakdawnugan
17	infrasonics .....	suludnugan
18	sonic barrier .....	túnuging hadláng
19	supersonic .....	hignugin ( <i>higít + tunugin</i> )
20	subsonic .....	kubnugin ( <i>kubós + tunugin</i> )
21	hypersonic .....	sukdulnugin ( <i>sukdulin + tunugin</i> )
22	supersonic speed .....	hignuging bilís
23	subsonic speed .....	kubnuging bilís
24	Mach 2 speed .....	bilís na 2 Mak
25	wave (mech.) .....	alon
26	wave motion .....	áluning kilos
27	wave energy .....	áluning kusóg
28	transverse wave .....	along haláng
29	longitudinal wave .....	along ayón
30	amplitude .....	hagkís
31	frequency .....	dalás
32	crest .....	tuktók
33	trough .....	lambák
34	loop .....	likaw
35	node .....	bukó
36	wave speed .....	bilís-alon

37	wavelength (mech.)	habang-alon
38	wave period	lawig-alon
39	medium	tálaytayan
40	wave medium	tálaytayan ng alon
41	elastic medium	igkasing tálaytayan
42	uniform (pert. to structure) (adj.)	sanyusin (isáng + ayos + -in)
43	uniform medium	sanyusing tálaytayan
44	nonuniform medium	dísanyusing tálaytayan
45	compression of medium	pagtipíl ng tálaytayan
46	rarefaction of medium	pagbuklád ng tálaytayan
47	reflection	sabalík
48	refraction	salikô
49	diffraction	saliwás
50	radiation (not radioactive)	dagalat
51	reflected wave	balík-alon
52	refracted wave	likóng-alon
53	diffracted wave	liwás-alon
54	interfere	hilabot (Bis.)
55	interference	kahilabtán
56	constructive interference	mapamuóng kahilabtán
57	destructive interference	mapanirang kahilabtán
58	phase	guwâ (Hlg.)
59	in phase	kaguwâ
60	out of phase	díkaguwâ
61	resonance (acoustics)	alingaw
62	dissonance	dílingaw
63	echo	alingawngáw
64	reverberation	balingawngáw
65	resonant vibration	álingawíng kiníg
66	resonator	pang-alingaw
67	forced vibration	pilít na kiníg
68	natural frequency	likás na dalás
69	beat	pintíg
70	beat frequency	pintíg-dalás
71	intensity	tindí
72	intensity level	kapantayan ng tindí
73	loudness of sound	kalakasán ng tunóg
74	pitch	tinís
75	timbre	kaalingawán ( <i>kaalingawán, alingaw</i> )
76	Doppler effect	bisang Doppler
77	hearing	diníg
78	audibility	karinggán
79	area of audibility	dawak ng karinggán

80	upper limit of audibility .....	pang-itaás na hanggán ng karinggán
81	lower limit of audibility .....	pang-ibabáng hanggán ng karinggán
82	range .....	abot
83	infrasonic range .....	suludnugang abot
84	range of audibility .....	abot ng karinggán
85	threshold of hearing .....	gilid ng diníg
86	threshold of pain .....	gilid ng sakít
87	area of sound .....	dawak ng tunóg
88	region of speech .....	danay ng katinigan
89	vibrograph .....	kinígsulat
90	vibroscope .....	kinígsipat
91	oscilloscope .....	tuguysipat
92	Law of Density .....	Batás ng Kasiksikán
93	Law of Length .....	Batás ng Habà
94	Law of Diameter .....	Batás ng Bantód
95	tone .....	linig ( <i>ulinig</i> )
96	overtones .....	sampawlinig
97	chord .....	sanlinigan
98	major chord .....	dakóng sanlinigan
99	note .....	tikníg ( <i>titik ng linig</i> ), nota
100	one of three tones forming a chord .....	kalinig
101	musical scale .....	találinigan ( <i>találinggán</i> )
102	music as an art and science .....	palálinigan ( <i>palálinggán</i> )
103	diatonic scale .....	találinggáng payák
104	chromatic scale .....	találinggáng pinayaman
105	tempered scale .....	találinggáng pinaglakíp
106	tune .....	tunig ( <i>pantugtuging tinig</i> )
107	atuned .....	katunig
108	to tune .....	itunig
109	tuned .....	tuníg
110	tuner (instrument) .....	panunig
111	tuner (person) .....	mánununig
112	discord .....	sigalót
113	discordant .....	masigalót
114	harmony .....	suwatò
115	harmonious .....	masuwatò, súwatuín
116	harmonize .....	magsuwatò, isuwatò, suwatuín
117	harmonics .....	kasuwatò
118	third harmonics .....	ikatlóng kasuwatò
119	fundamental tone .....	batayáng linig
120	melody .....	himig
121	euphony .....	hunig

<b>122</b>	cacophony .....	dihunig
<b>123</b>	rhythm .....	aliw-íw
<b>124</b>	cadence .....	ragsák ( <i>ragasâ</i> + <i>bagsák</i> )
<b>125</b>	the playing of a musical instrument .....	tugtóg
<b>126</b>	musical instrument .....	panugtóg
<b>127</b>	a musical piece .....	tugtugin
<b>128</b>	a musical score or sheet .....	talátugtugan
<b>129</b>	a musical score with lyrics .....	taláawitan
<b>130</b>	art and practice of playing on musical instruments .....	palátugtugan
<b>131</b>	string of a musical instrument .....	bagtíng
<b>132</b>	stringed instrument .....	bagtingáng panugtóg
<b>133</b>	wind instrument .....	ihipáng panugtóg
<b>134</b>	percussion instrument .....	linggaláng panugtóg

# SÚGAAN

(Optics)

1	optics .....	(dalúb) súgaan
2	light .....	sugâ (Bis.)
3	visible light .....	tahaw na sugâ
4	invisible light .....	dítahaw na sugâ
5	ray .....	sinag
6	optical system .....	kaayusáng súgaanin
7	propagation of light .....	paglawak ng sugâ
8	geometrical optics .....	sukgisaning súgaan
9	physical objects .....	liknaying súgaan
10	physiological objects .....	liksananing súgaan
11	quantum (level of energy) .....	damò (Bis.)
12	quantum optics .....	dámuing súgaan
13	photoelectricity .....	sugadagitbán
14	photoelectric (adj.) .....	sugadagitbín
15	photoelectric effect .....	sugadagitbíng bisà
16	photoelectric cell .....	sugadagitbíng silíd
17	radiant energy .....	dagálating kusóg
18	radiation (not radioactive) .....	dagalat
19	emitter .....	pang-itíd
20	emission of waves .....	pag-itíd ( <i>itíd</i> , <i>llk.</i> ) ng liboy
21	wavelength (electromagnetic) .....	libuyhabà
22	frequency .....	dalás
23	straight line propagation .....	tuwíd-gúhiting paglawak
24	uniform medium .....	sanyusing tálaytayan
25	interference .....	kahilabtán
26	illuminance .....	kaliwanagan
27	illumination .....	liwanag
28	luminous intensity .....	liwánaging tindí
29	luminosity .....	pagkámaliwanag
30	luminous energy .....	liwánaging kusóg
31	luminous flux .....	liwánaging himaymáy
32	luminosity curve .....	kilò ng pagkámaliwanag
33	level of illumination .....	kapantayan ng liwanag
34	luminiscence .....	sanag, kasanagan (Bis.)
35	luminiscent .....	masanag
36	luminous .....	naglíliwanag
37	illuminated .....	nalíliwanagan, maliwanag

38	lighted .....	nasusugaán
39	fluorescence .....	gilaw, kagilaw (Mat. Tag.)
40	iridescence .....	silák, kasilakán (Bis.)
41	iridescent .....	masilák
42	phosphorescence .....	pospowanag ( <i>pósporús + liwanag</i> )
43	phosphorescent .....	mapoposwanag
44	incandescence .....	pagbabaga
45	incandescent .....	nagbabaga
46	dazzling .....	masilaw
47	brilliant .....	maningníng
48	lighting .....	pagsusugâ
49	photometer .....	sugásukod
50	foot-candle meter .....	panukod ng talampakan-kandila
51	point source of light .....	tungos na batis ng sugâ
52	extended source of light .....	kálat na batis ng sugâ
53	speed of light .....	bilís ng sugâ
54	diffusion (of light) .....	pangangalat
55	diffuse .....	mangalat
56	reflection .....	sabalík
57	refraction .....	salikô
58	diffraction .....	saliwás
59	refractive .....	salikuanin
60	refractive error (of the eye) .....	salikuaning malí (ng matá)
61	magnifier, magnifying glass .....	pandakô ( <i>dakô</i> , Bis.)
62	sensitivity .....	pagkamatúgunin
63	sensitivity of the eye .....	pagkamatúgunin ng matá
64	vision .....	pananáw
65	persistence of vision .....	pananatili ng pananáw
66	limitations of vision .....	kahangganán ng pananáw
67	focus .....	tingob (Bis.)
68	focal point .....	tíngubing tungos
69	conjugate focus .....	katápatang tingob
70	concave (adj.) .....	malukóng
71	convex (adj.) .....	malukób
72	lens .....	paningob (pagtingob)
73	concave lens .....	malukóng na paningob
74	concavity .....	kalukungán
75	convex lens .....	malukób na paningob
76	convexity .....	kalukubán
77	plano-concave lens .....	lapyánlukóng na paningob
78	plano-convex lens .....	lapyánlukób na paningob
79	angle of reflection .....	sihà ng sabalík
80	angle of refraction .....	sihà ng salikô

<b>81</b>	critical angle .....	maselang sihá
<b>82</b>	angle of incidence .....	sihá ng pagpasok
<b>83</b>	concave mirror .....	malukóng na salamín
<b>84</b>	convex mirror .....	malukób na salamín
<b>85</b>	focal length .....	tingubing habà
<b>86</b>	optical center .....	súgaing tungâ
<b>87</b>	optical density .....	súgaing kasiksikán
<b>88</b>	polarization (optical) .....	sataluktók
<b>89</b>	polarized light .....	sinataluktók na sugâ
<b>90</b>	image (optical) .....	hulagwáy (Bis.)
<b>91</b>	real image .....	tunay na hulagwáy
<b>92</b>	virtual image .....	tanawing hulagwáy
<b>93</b>	color .....	kulay
<b>94</b>	color vision .....	pananáw-kulay
<b>95</b>	color sensation .....	karandamang-kulay
<b>96</b>	spectrum, spectra .....	balangáw
<b>97</b>	spectrometer .....	balngáwsukat
<b>98</b>	spectroscope .....	balngáwsipat
<b>99</b>	colorimeter .....	kulaysukat
<b>100</b>	primary colors .....	mgá pángunahíng kulay
<b>101</b>	complementary colors .....	mgá magkapunóng kulay
<b>102</b>	chromatic .....	kúlayin
<b>103</b>	monochromatic .....	sangkúlayin
<b>104</b>	dichromatic .....	duhángkúlayin
<b>105</b>	polychromatic .....	damkúlayin
<b>106</b>	achromatic .....	awánkúlayin
<b>107</b>	achromatic lens .....	awánkúlaying paningob
<b>108</b>	chromatic aberration .....	kúlaying baltík
<b>109</b>	spherical aberration .....	timbúluging baltík
<b>110</b>	accommodation .....	saangkóp
<b>111</b>	reflected light .....	balinag
<b>112</b>	transmitted light .....	aninag
<b>113</b>	refracted light .....	sinalikúng liwanag
<b>114</b>	transparent .....	naaaninag, aninagin
<b>115</b>	translucent .....	nanganganinag, nganinagin
<b>116</b>	transparency, transparence .....	aninág
<b>117</b>	translucency, translucence .....	nganinág
<b>118</b>	transmitted but diffused light .....	nginág
<b>119</b>	film .....	panginag
<b>120</b>	photography .....	palánginagan
<b>121</b>	photographer .....	manginginag
<b>122</b>	photograph .....	talángnginag

<b>123</b>	photographic (adj.) .....	sangnginagin
<b>124</b>	visual .....	tanawin
<b>125</b>	audio-visual .....	diníg-tanawin

## BALNIAN

(Magnetics)

1	magnet .....	balanì
2	magnetic .....	balniin
3	magnetism (sc.) .....	balnian
4	magnetism (property) .....	kabalnián ( <i>kabalanián</i> )
5	lodestone .....	batúbalanì
6	iron magnet .....	bakalbalanì
7	pole .....	taluktók ( <i>tuktók</i> )
8	magnetic pole .....	balniing taluktók
9	north magnetic pole .....	hilagang balniing taluktók
10	south magnetic pole .....	timugáng balniing taluktók
11	magnetic compass .....	balniing páralumán
12	permanent magnet .....	lángiang balanì
13	temporary magnet .....	pansamantaláng balanì
14	attraction .....	higom
15	magnetic attraction .....	balniing higom
16	repulsion .....	sikwáy (Bis.)
17	magnetic repulsion .....	balniing sikwáy
18	field .....	larang
19	magnetic field .....	balniing larang
20	uniform magnetic field .....	sanyusing balniing larang
21	nonuniform magnetic field .....	dísanyusing balniing larang
22	magnetic effect .....	balniing bisà
23	magnetic force .....	balniing isig
24	magnetic lines of force .....	balniing guhit ng isig
25	magnetic flux .....	balniing himaymáy
26	magnetic induction .....	balniing karawitan
27	line of induction .....	guhit ng karawitan
28	flux density .....	kasiksikán ng himaymáy
29	permeability .....	katulután ( <i>tulót</i> )
30	solenoid .....	malábumbóng
31	armature .....	paakmâ
32	toroid .....	malábagwáy
33	toroid coil .....	malábagwáy na kidkíd
34	magnetic shield .....	balniing sanggá
35	electromagnet .....	dagibalanì
36	electromagnetism (sc.) .....	dagibalnian
37	electromagnetism (property) .....	kadagibalnian

38	wave (electromagnetic) .....	liboy
39	electromagnetic wave .....	dagibalniing liboy, liboy-dagibalniin
40	magneto .....	balnitab ( <i>balaning-dagitab</i> )
41	magnetodynamics .....	balnisigan
42	magnetohydrodynamics .....	balnidanúmsigan

## DÁGITBÁN

(Electricity)

1	electricity (phenomenon) .....	dagitab
2	electricity (science) .....	(dalúb) dágitbán
3	current .....	saloy
4	electric current .....	saloy-dagitab
5	electron .....	dagisik (NSL)
6	electrolyte .....	dagilusáw ( <i>dagitab + lusáw</i> )
7	electrolytic (1) .....	dagibílusin
8	electrolytic (2) .....	dagilúsawin
9	electrolysis .....	dagibilos
10	hydrolysis .....	tubigbilos
11	electrify .....	sadagitbín
12	electrification .....	sadagitab
13	electromotive (adj.) .....	dagisáluyin
14	electromotive series .....	dagisáluying dalayráy
15	electromotive force .....	dagisáluying isig
16	potential (phys.) .....	kaigtingán
17	electric potential .....	dagitbíng kaigtingán
18	electrostatics .....	dagitígilan
19	electrostatic (adj.) .....	dagitígilin
20	electrostatic force .....	dagitígiling isig
21	galvanic current .....	saloy-galbanhín
22	galvanic electricity .....	dagitab-galbanhín
23	static electricity .....	dagitab-tigíl
24	static (in a radio circuit) .....	saloy-tabluwás
25	electric charge .....	tabláy ( <i>dagitab na tagláy</i> )
26	positive charge .....	tahás na tabláy
27	negative charge .....	balíng na tabláy
28	moving charge .....	kumikilos na tabláy
29	charge (v.) .....	tablayán
30	discharge (n.) .....	tabluwás ( <i>dagitab na luwás</i> )
31	discharge (v.) .....	tabluwasín, tabluwasán
32	static discharge .....	tígiling tabluwás
33	spark .....	títis
34	arc .....	bantók
35	positive electricity .....	tahás na dagitab
36	negative electricity .....	balíng na dagitab
37	electropositivity .....	kadagítahasán

38	electronegativity .....	kadagíbalingán
39	electrode .....	dagindás ( <i>dagitab</i> + <i>landás</i> )
40	anode (positive electrode) .....	tahandás ( <i>tahás</i> + <i>dagindás</i> )
41	cathode (negative electrode) .....	balindás ( <i>balíng</i> + <i>dagindás</i> )
42	resistance .....	sagwíl
43	resistor .....	panagwíl
44	resistivity .....	kasagwilán
45	capacitance .....	kalulanan
46	capacitor .....	panlulan
47	condenser .....	pangintáy ( <i>pangkintáy</i> )
48	inductance .....	dawit
49	induction .....	karawitan
50	coil .....	kidkíd
51	field coil .....	láranging kidkíd
52	field pole .....	láranging taluktók
53	moving coil .....	kílusing kidkíd
54	stationary coil .....	tígiling kidkíd
55	inductor .....	panawit
56	induction coil .....	panawit-kidkíd
57	wave (electromagnetic) .....	liboy
58	electric wave .....	liboy-dagitab
59	electromagnetic wave .....	dagibalniing liboy, liboy-dagibalniin
60	conductor .....	saluyán
61	nonconductor .....	dísaluyán
62	semiconductor .....	malásaluyán
63	insulation .....	sabukód
64	insulator .....	pambukód
65	switch .....	kabtól ( <i>kabít</i> + <i>putol</i> )
66	break (in a circuit) .....	pugtô
67	cut (in a circuit) .....	putól
68	ground (in a circuit) .....	sayad
69	short circuit .....	laktód (Hlg.)
70	resonance (elec.) .....	alunig
71	resonant coil .....	áluniging kidkíd
72	frequency .....	dalás
73	wavelength (electromagnetic) .....	libuyhabà
74	amplitude .....	hagkis
75	bypass .....	lulos
76	connection (elec.) .....	kabít
77	electrical connection .....	dagitbíng kabít
78	series connection .....	súnurang kabít
79	parallel connection .....	ágapayáng kabít
80	circuit .....	salikop

81	circuitry .....	kasalikupan
82	series circuit .....	súnurang salikop
83	parallel circuit .....	ágapayáng salikop
84	series-parallel connection .....	súnuran-ágapayáng kabít
85	electrical system .....	kaayusáng dagitbín
86	the line .....	ang kakawarán
87	across-the-line .....	haláng-sa-kakawarán
88	interrupter .....	panggatól
89	intermittent current .....	gatól na saloy
90	direct current (DC) .....	túwirang saloy (TS)
91	alternating current (AC) .....	sálisiháng saloy (SS)
92	converter .....	pamalinyô
93	network .....	kabalagan ( <i>balag</i> )
94	closed circuit .....	piníd na salikop
95	open circuit .....	bukás na salikop
96	internal circuit .....	panloób na salikop
97	external circuit .....	panlabás na salikop
98	make or close a circuit .....	ipiníd ang salikop
99	break or open a circuit .....	buksán ang salikop
100	voltage .....	kabolthán
101	amperage .....	kaampirán
102	voltmeter .....	bóltasukod
103	ammeter .....	ámsukod
104	spark plug .....	pasak-panduóp
105	fuse .....	túnawin
106	electrostatic generator .....	likhabláy ( <i>likhâ + tabláy</i> )
107	electric generator, dynamo .....	likhitab ( <i>likhâ + dagitab</i> )
108	electric motor .....	dagisog ( <i>dagitab + isog</i> )
109	armature .....	paakmâ
110	charger .....	panabláy
111	storage battery .....	tinggalitab ( <i>tinggalang dagitab</i> )
112	cell .....	silíd
113	battery .....	salansán, bateryá
114	electric transformer .....	palitab ( <i>palít + dagitab</i> )

## DÁGISIKÁN

(*Electronics*)

1	electron .....	dagisik (NSL)
2	electronics .....	dágisikán
3	electronic (adj.) .....	dágisikín
4	electronic device .....	dágisikíng pakasám, pakasám-dagisik
5	resistance .....	sagwíl
6	resistor .....	panagwíl
7	resistivity .....	kasagwilán
8	capacitance .....	kalulanan
9	capacitor .....	panlulan
10	inductance .....	dawit
11	induction .....	karawitan
12	inductor .....	panawit
13	induction coil .....	panawit-kidkíd
14	vacuum tube .....	swanging tubo
15	detector .....	paniktík
16	amplifier .....	pangibayo
17	anode .....	tahandás
18	cathode .....	balindás
19	electrode .....	dagindás
20	diode .....	duhandás
21	tunnel diode (Esaki diode) .....	duhandás-Esaki
22	triode .....	talundás
23	tetrode .....	patandás
24	pentode .....	limandás
25	antenna .....	antena
26	loop antenna .....	antenang likáw
27	resonant coil .....	álunigíng kidkíd
28	frequency .....	dalás
29	wave (electromagnetic) .....	liboy
30	wavelength (electromagnetic) .....	libuyhabà
31	waveband .....	libuybigkís
32	channel (electronmagnetic) .....	libuyán
33	radiation (radioactive) .....	dagiláp
34	radioactivity .....	karagilapán
35	radio- (technical prefix) .....	-digláp
36	radar .....	sigláp (NSL)
37	television .....	tanláp ( <i>tanáw</i> + <i>digláp</i> )

38	radiogram .....	hatidláp ( <i>hatíd + digláp</i> )
39	cablegram .....	hatidwád ( <i>hatíd + kawad</i> )
40	telegram .....	pahatídkawad
41	microphone .....	miktinig
42	earphone, headphone .....	talinig ( <i>talinga, Bis. + tinig</i> )
43	loudspeaker .....	daktinig
44	telephone .....	hatinig ( <i>hatíd + tinig</i> )
45	radiotelephone .....	hatinig-digláp
46	radiocommunication .....	páhátirang-digláp
47	radio transmitter .....	pangalat-digláp
48	radio receiver .....	panagap-digláp
49	home radio receiver .....	pambahay na panagap-digláp, radyo
50	regenerative radio receiver .....	mulikhaing panagap-digláp
51	radiomagnetic indicator .....	diglapbalniing pamatlíg
52	radio telescope .....	daksipat-digláp
53	oscillation .....	tugóy
54	oscillator .....	panugóy
55	oscilloscope .....	tugúyisipat
56	oscillogram .....	talantugóy
57	oscillograph .....	talaantugóy
58	radio operator's room .....	pádiglapáng silíd
59	semiconductor .....	malásaluyán
60	transistor .....	saligwíl ( <i>salin + sagwíl</i> )
61	transistor radio .....	digláp-saligwíl, transistor
62	collector .....	panlikom
63	emitter .....	pang-itíd
64	base .....	takad
65	atom .....	múlapik ( <i>múlaang + tipik</i> )
66	donor atom .....	bígaying múlapik
67	accepter atom .....	tánggaping múlapik
68	unbound electron .....	maláyang dagisik
69	miniature circuit .....	miksalikop
70	tune .....	tunig
71	tuning .....	pagtunig
72	tuned .....	tuníg
73	tuner (instrument) .....	panunig
74	tuning coil .....	panunig-kidkíd
75	tuning condenser .....	panunig na pangintáy
76	tuned circuit (electronics) .....	tuníg na salikop

# BÚTURAN

(Nuclear Physics)

1	nucleonics, nuclear physics .....	búturán
2	nucleus .....	butód
3	light nucleus .....	magaáng butód
4	heavy nucleus .....	mabigát na butód
5	atom .....	múlapik ( <i>múlaang tipik</i> )
6	atomics, atomic physics .....	(dalúb) mulpikan
7	molecule .....	múlatil ( <i>múlaang butil</i> )
8	particle .....	tipik
9	alpha article .....	tipik-alpa
10	beta particle .....	tipik-beta
11	alpha ray .....	sinag-alpa
12	gamma ray .....	sinag-gama
13	radiation (radioactive) .....	dagiláp (NSL)
14	alpha radiation .....	dagiláp-alpa
15	beta radiation .....	dagiláp-beta
16	gamma radiation .....	dagiláp-gama
17	Cerenkov radiation .....	dagiláp-Cerenkov
18	source of radiation .....	batis ng dagiláp
19	plasma (phys.) .....	dinagipik
20	charge (fuel) .....	subò (gatong)
21	charge (electrical) .....	tabláy (dagitab na tagláy)
22	elementary electronic charge .....	hasík
23	proton .....	múlasik ( <i>múlaang hasík</i> )
24	electron .....	dagisik (NSL)
25	positron .....	tahasik ( <i>tahás na hasík</i> )
26	neutron .....	awansik ( <i>awáng hasík</i> )
27	dueteron .....	duhasik
28	neutrino .....	awansikin
29	antiproton .....	labanmúlasik
30	antineutron .....	labanawansik
31	antineutrino .....	labanawansikin
32	meson .....	tungapik ( <i>tungâ + tipik</i> )
33	mu meson, $\mu$ -meson .....	mu tungapik, $\mu$ -tungapik
34	pi meson, $\pi$ -meson .....	pay tungapik, $\pi$ -tungapik
35	tau meson, $\tau$ -meson .....	taw tungapik, $\tau$ -tungapik
36	kappa meson, $\kappa$ -meson .....	kapa tungapik, $\kappa$ -tungapik
37	theta meson, $\theta$ -meson .....	teta tungapik, $\theta$ -tungapik

38	hyperon .....	sukdusik ( <i>sukdulang hasík</i> )
39	atomic shell .....	mulpikníng balok
40	inner (outer) shell .....	panloób (panlabás) na balok
41	Bohr model of the atom .....	hulwarang-Bohr ng múlapik
42	accelerator .....	pandarasisg
43	Van de Graaff accelerator .....	pandarasisg Van de Graaff
44	linear accelerator .....	túwiring pandarasisg
45	particle accelerator .....	pandarasisg ng tipik
46	accelerated particle .....	dinarasisg na tipik
47	high speed particle .....	taás-bilís na tipik
48	high energy particle .....	taás-kusóg na tipik
49	betatron .....	pandarasisg-beta, bétatrón
50	cosmotron .....	pandarasisg-mayaw, kósmotrón
51	cyclotron .....	pandarasisg-ikit, sáyklotrón
52	disintegration .....	hiugnáy
53	artificial disintegration .....	gawá-gawáng hiugnáy
54	heavy water .....	tubig na mabigát
55	heavy hydrogen .....	haydrohéng mabigát
56	deuterium .....	duiryum
57	atom smasher .....	pamungkág-múlapik
58	bombardment .....	tampól, pagtampól
59	nuclear bombardment .....	tampól-butód
60	released energy .....	pinawaláng kusóg, nakawaláng kusóg
61	breeder .....	panuplíng
62	reaction (nuclear) .....	tambisà ( <i>tambíng + bisà</i> )
63	chain reaction .....	patanikaláng tambisà
64	reactor (nuclear) .....	tambísaan
65	thermonuclear .....	ínitbutudnín
66	thermonuclear reaction .....	ínitbutudníng tambisà
67	stable .....	matatág
68	unstable .....	dímatatág
69	shield .....	sanggá
70	slug .....	putol
71	tracer .....	pambakás
72	track .....	taluntón
73	deflect a particle .....	liwasín ang isáng tipik
74	deflected particle .....	liwás na tipik
75	collision of particles .....	banggaan ng mgá tipik
76	emission of particle .....	pag-ítíd ng mgá tipik
77	isotope .....	kahasík
78	radioisotope .....	dagilápkahasík
79	pitchblende .....	pitsblen
80	pile .....	talaksán

81	photoelectric effect .....	sugadagitbíng bisà
82	monitor .....	panubaybáy
83	moderator .....	panamtám
84	röntgen .....	rondiyén
85	röntgen ray .....	sinag-rondiyén
86	ion .....	dagipik ( <i>dagít</i> ab + <i>tipik</i> )
87	ionization chamber .....	padágipikán
88	cloud chamber .....	páulapán
89	geiger counter .....	pamilang-gayger
90	half-life .....	kalahatímbuhay
91	fusion (nuclear) .....	sapisan (búturin)
92	fission (nuclear) .....	sasipak (búturin)
93	fissionable .....	sípakin
94	controlled fission .....	supíl na pagsipák
95	controlled fusion .....	supíl na pagpisan
96	fissionable fuel .....	sípaking gatong
97	dosimeter .....	tambadsukod
98	control rod .....	tandós-panupil
99	converter .....	pamalinyô
100	core .....	ubod
101	critical mass .....	maselang bugát
102	critical state .....	maselang himtáng
103	decay (of atoms) .....	pugnáw (ng mgá múlapik)
104	Cobalt-60 .....	Kobalt-60

## MGÁ ÍSAHIN NG SUKAT AT SUKOD

*(Units of Measurement and Dimensions)*

1	newton .....	nyuton
2	joule .....	dyul
3	dyne .....	dina
4	erg .....	ergi
5	erg per second .....	ergi bawa't saglít
6	foot-pound .....	talampakan-libra
7	foot-pound per second .....	talampakan-libra bawa't saglít
8	poundal .....	librahin
9	watt .....	wat
10	calorie .....	kálori
11	Centigrade scale .....	súkurang Sentigrado
12	Fahrenheit scale .....	súkurang Párenhait
13	absolute scale .....	súkurang wagás
14	Kelvin scale .....	súkurang Kelbin
15	bel .....	bel
16	decibel .....	désibel
17	Mach .....	Mak
18	candle (unit of illumination) .....	kandilà
19	foot-candle .....	talampakan-kandilà
20	lumen .....	lumen
21	quantum (unit of energy) .....	kuwantum
22	coulomb .....	kulóm
23	ampere .....	ampir
24	volt .....	bolt
25	ohm .....	om
26	farad .....	parad
27	henry .....	henri
28	weber .....	weber
29	oersted .....	ursted
30	maxwell .....	makswel
31	gauss .....	gos
32	statcoulomb .....	tigkulóm ( <i>tigíl na kulóm</i> )
33	statampere .....	tigampir
34	statvolt .....	tigbólt
35	statohm .....	tigóm
36	statfarad .....	tigparad
37	stathenry .....	tighenri

38	abcoulomb .....	wagkulóm ( <i>wagás na kulóm</i> )
39	abampere .....	wagampir
40	abvolt .....	wagbólt
41	abohm .....	wagóm
42	abfarad .....	wagparad
43	abhenry .....	waghenri
44	röntgen .....	róndiyén
45	milliröntgen .....	miliróndiyén, kaliboróndiyén
46	electrostatic system of units (esu) .....	dagitígiling kaayusáng-ísahin (dti)
47	electromagnetic system of units (emu) .....	dagibalniing kaayusáng-ísahin (dbi)
48	centimeter-gram-second (cgs) system of units	kadanmetro-gramo-saglít (kgs) na kaayusáng-ísahin
49	cgs system .....	kaayusáng kgs
50	meter-kilogram-second (mks) system of units .	metro-libogram-saglít (mls) na kaayusáng-ísahin
51	mks system .....	kaayusáng mls
52	rationalized system .....	sinamatwid na kaayusán
53	unrationalized system .....	dísinatmatwid na kaayusán

## MAHAHALGÁNG SUGNAYANING LÁGIIN

(Important Physical Constants)

1	physical constant		sugnayaning lágiin
2	acceleration due to gravity	$g$	darasig ng dagsín
3	density of water, maximum	$\rho_{H_2O}$	kasiksikán ng tubig, higdulin
4	density of mercury	$\rho_{Hg}$	kasiksikán ng asoge
5	one atmosphere (lbs. per sq. inch)	14.7	isáng kaanginán (libra bawa't daling parisukat)
6	standard atmospheric pressure	$P_0$	pámantayang kaanginaning diín
7	gravitational constant	$G$	dagsining lágiin
8	molar volume of ideal gas	$V_0$	molníng buók ng uliráng buhág
9	Avogadro's number	$N_0$	Abogadrong Bilang
10	ideal gas constant	$R_0$	lágiin ng uliráng buhág
11	Boltzmann's constant	$k$	lágiing Boltsman
12	Stefan-Boltzmann's constant	$\sigma$	lágiing Stepán-Boltsman
13	speed of light	$c$	bilís ng sugã
14	electronic charge (magnitude)	$e$	dágisiking tabláy (dakíl)
15	charge-to-mass ratio of electron	$\frac{e}{m}$	tabláy-sa-bugát na tagwáy ng dagisik
16	Faraday's constant	$F = \frac{N_0}{e}$	lágiing Páradáy
17	ice point	$T_0$	tungos ng yelo
18	mechanical equivalent of heat (ergs per calorie)	$4.1855 \times 10^7$	sigmuing kahalgá ng init (ergi bawa't kálori)
19	absolute zero of temperature	$-273.15^\circ C$	wagás na awán ng kaintán
20	atomic mass unit (amu)		ísahin ng mulpikníng bugát (imb)
21	mass-energy conversion factor		kabuô ng pagbalinyóng bugát-kusóg
22	disintegration constant		hiugnaying lágiin

## DALÚBTÁLAAN

(Astronomy)

1	astronomy .....	dalúbtálaan
2	astronomer .....	dalúbtalà
3	astronomical .....	dalúbtálain
4	heavenly body .....	lawas na langitnín
5	astronomical body .....	lawas na dalúbtálain
6	star (astron.) .....	talà
7	star (figure, shape) .....	bituin
8	planet .....	buntalà
9	satellite .....	buntabay
10	artificial satellite .....	likháng buntabay
11	earth satellite .....	dútaing buntabay
12	asteroid .....	malátalà
13	planetoid .....	malábuntalà
14	comet .....	barikód (ETD)
15	meteor .....	bulalakaw
16	meteoroid .....	búlalayák ( <i>bulalakaw na layák</i> )
17	meteorite .....	bulalato ( <i>bulalakaw na bató</i> )
18	constellation .....	tálanyò ( <i>talang anyô</i> )
19	star group .....	talampók ( <i>talang tumpók</i> )
20	star cluster .....	talumpón ( <i>talang pumpón</i> )
21	nebula .....	ulanag ( <i>ulap ng liwanag</i> )
22	zodiac .....	tahaláw ( <i>táhakan ng adláw</i> )
23	ecliptic .....	guhítláw ( <i>guhít ng adláw</i> )
24	crater .....	lungáw
25	eclipse .....	lahò
26	magnitude (astron.) .....	kináng
27	horizon .....	kagilíran
28	zenith .....	ituktók
29	nadir .....	idalum (Bis.)
30	telescope .....	daksipát ( <i>dakóng sipat</i> )
31	radio telescope .....	daksipát-digláp
32	Sun, Sol (sun) .....	Araw, Adláw (Bis., Bkl.)
33	Moon, Luna, Selene (moon) .....	Buwán, Bulan (Bis., Bkl.)
34	New Moon .....	Patáy na Bulan, Bagong Bulan (bagong buwán)
35	First Quarter Moon .....	Bulang Nagbibilog (unang sángkapat ng buwán)

36	Full Moon	Bulang Kabilugan (kabilugan ng buwán)
37	Last Quarter Moon	Bulang Nagdudurog (hulíng sángkapat ng buwán)
38	Crescent Moon	Bulang Gasukláy (gasukláy na buwán)
39	selenography	talábulanan
40	Earth, Tierra, Tellus	Dutà
41	terrestrial	dútain
42	terrestrial magnetism	dútaing balanì
43	the whole world	ang sandáigdigán
44	worldwide	sandáigdigin, pandaigdíg
45	universe	sansinukob
46	universal	sansinukbín
47	island universe	pulóng sansinukob
48	the entire creation	sangkalikhaán
49	sky	langit
50	heaven	kalangitán
51	firmament	santinakpán
52	planetary	buntálain
53	planetary system	kabuntalaan, kaayusáng buntálain
54	interplanetary	pangkabuntalaan, kabuntalaanin
55	Solar System	Kaayusáng Adláv, Kabuntalaang Adláv
56	solar flare	adlawing liyáb
57	sunspot	batík-adláv
58	stellar system	kaayusáng talà
59	galaxy	sanlibután
60	galactic (adj.)	sanlibutnín
61	metagalaxy	labawsanlibutnín
62	The Twelve Constellations of the Zodiac	Ang Labíndalawáng Tálanyò ng Tahakláv
63	Aries	Tupa
64	Taurus	Damulag
65	Gemini	Kambál
66	Cancer	Alimango
67	Leo	Halímaw
68	Virgo	Dalaga
69	Libra	Talarò
70	Scorpio	Alakdán
71	Sagittarius	Mámamanà
72	Capricornus	Kambíng
73	Aquarius	Mánunubig
74	Pisces	Isdà
75	Milky Way	Daáng Maláguas
76	Big Dipper	Malakíng Tabò
77	Small Dipper	Maliít na Tabò

78	Orion the Hunter .....	Oryón, ang Mángangaso
79	Canis Major .....	Malakíng Aso
80	Canis Minor .....	Maliít na Aso
81	Cassiopeia .....	Kasyopeya
82	Argo .....	Daóng
83	Southern Cross .....	Timugáng Paripá
84	Northern Cross .....	Hilagang Paripá
85	Cygnus .....	Gansâ
86	Eridanus .....	Ilog
87	Cetus .....	Dambuhalà
88	Pleiades .....	Mapúlon, Supot ni Hudas
89	Mercury .....	Merkuryo
90	Venus .....	Benus, Tanglâw-dagâ
91	Mars .....	Marte
92	Jupiter .....	Hupitér
93	Saturn .....	Saturno
94	Uranus .....	Urano
95	Neptune .....	Neptuno
96	Pluto .....	Pluto
97	quasar .....	digtálain ( <i>digláp + talà + -in</i> )
98	cosmos .....	mayaw
99	cosmic .....	mayawin
100	cosmic ray .....	sinag-mayawin
101	chaos .....	dímayaw
102	chaotic .....	dímáyawin
103	cosmology .....	dalúbmáyawaw
104	cosmography .....	talámáyawaw
105	cosmogony .....	mulmáyawaw ( <i>mulâ + mayaw + -an</i> )
106	orbit .....	ligirán
107	apogee, aphelion .....	higlayò
108	perigee, perihelion .....	kublayò
109	pilot .....	malim (NSL)
110	astronaut .....	malintalà ( <i>malim + talà</i> )
111	cosmonaut .....	malimayaw ( <i>malim + mayaw</i> )
112	rocket .....	sikpád ( <i>sikad + lipád</i> )
113	three-stage rocket .....	tatlóng-yugtóng sikpád
114	launch pad .....	bunsuran
115	tracking station .....	himpilang panaluntón
116	space station .....	himpilang pangkalawakan
117	reentry .....	balipasok
118	soft landing (on the moon) .....	mahinay na pagdungkâ (sa bulan) ( <i>dungkâ, Bis.</i> )
119	crash landing .....	pabagsák na pagdungkâ

120	landing site .....	dungkaan
121	lift-off .....	paglumpát ( <i>lumpát</i> , leap, Hlg.)
122	trajectory .....	imbulóg
123	capsule .....	litsidlán ( <i>maliít</i> na <i>sisidlán</i> )
124	training capsule .....	sánayang litsidlán
125	module .....	litsilíd ( <i>maliít</i> na <i>silíd</i> )
126	service module .....	lingkurang litsilíd
127	command module .....	páatasáng litsilíd
128	exploration module .....	gálugarang litsilíd
129	lunar module .....	búlaning litsilíd
130	nose cone .....	ngusong talulô
131	booster .....	pamudlóng (pambudlóng)
132	booster rocket .....	pamudlóng na sikpád
133	booster engine .....	pamudlóng na likhisog
134	descent engine .....	pambabáng likhisog
135	ascent engine .....	pantaás na likhisog
136	flight (of birds) .....	lipád
137	flight (of man-made craft) .....	lipáw (Hlg.)
138	atmospheric flight (of airplane) .....	kainginang lipáw (ng eruplano)
139	space flight .....	lávaking lipáw
140	aircraft .....	salipáw ( <i>salipadpád</i> + <i>lipáw</i> )
141	spacecraft .....	sikpáw ( <i>sikad</i> + <i>lipáw</i> )
142	spaceman .....	táunlawak
143	Apollo 11 astronaut .....	malintalà ng Apollo 11
144	space center .....	lunduyang pangkalawakan
145	Houston Space Center .....	Lunduyang Pangkalawakang Houston

## DALÚBDÚTAAN

(Geology)

1	Earth, Tierra, Tellus .....	Dutà
2	geology .....	(dalúb) dútaan
3	geologic, geological (1) .....	pandútaan, dútain
4	geologic (2) .....	dútaanin
5	geodesy .....	dúsúkatan ( <i>dutà + sukat + -an</i> )
6	geodetic .....	dúsúkatin
7	geography .....	taládútaan
8	geographic, geographical .....	pantaládútaan, taládútaanín
9	geophysics .....	dúliknayan
10	geophysical (1) .....	dúliknayin
11	geophysical (2) .....	dúliknayanin
12	geocentric .....	dútungain ( <i>dutà + tungâ + -in</i> )
13	geodynamics .....	dúísigan ( <i>dutà + ísig + -an</i> )
14	geomorphology .....	dúanyuan ( <i>dutà + anyô + -an</i> )
15	geoponics .....	dúlinangan ( <i>dutà + lináng + -an</i> )
16	hydroponics .....	danúmlínangan
17	geothermics .....	dúñitan
18	geostatics .....	dútigilan
19	land .....	lupà
20	ground .....	gabón (Kpn.)
21	soil .....	sulíp (Kpn.)
22	terrestrial .....	dútain
23	atmosphere .....	kaanginán
24	stratosphere .....	himpapayáw
25	toposphere .....	himpapawíd
26	ionosphere .....	kadagipikon
27	stone .....	bató
28	pebble .....	mikbató
29	rock .....	dakbató
30	ore .....	dúkalin
31	ore deposit .....	lagáy ng dúkalin
32	mineral .....	lupangkáp ( <i>lupang sangkap</i> )
33	mineralogy .....	lupangkapan
34	metal .....	metál
35	alloy .....	balahak
36	metallurgy .....	bálahakán
37	stratum .....	latag

38	layer .....	saray
39	fossil .....	haytó (buhay na nagíng bató)
40	weathering .....	sapanhón
41	erosion .....	pagkápuđpód, sapuđpód
42	crust of the Earth .....	upak ng Dutà
43	flint .....	pantíng
44	porcelain .....	pámangingin
45	marble .....	marmól (batúmbuháy)
46	copper alloy .....	tumbaga (batúmbaga)
47	granite .....	batúmbesi, tumbesi
48	basalt .....	batúmbakal
49	lodestone .....	batúbalanì
50	pumice .....	bugà
51	pumice stone .....	batóng bugà
52	whetstone .....	bugaán
53	alum .....	tawas
54	clay .....	luwád
55	clayey rock .....	pila
56	gravel .....	gasang, graba
57	alloyed gold .....	gigintô
58	island .....	pulô
59	archipelago .....	kapuluán
60	meta-archipelago .....	sampuluán
61	continent .....	lupalop
62	mountain .....	bundók
63	hill .....	buról
64	highland .....	kataasán
65	lowland .....	labak
66	slope (of hill or highland) .....	libís
67	slope (geological; of layers and strata) .....	dalisdís
68	mesa .....	talampás
69	plateau .....	pantayanin
70	ravine, precipice .....	bangín
71	valley .....	lambák
72	plain .....	kápatagan
73	clearing .....	palanas
74	isthmus .....	tangkáy
75	peninsula .....	tangwáy
76	level point of land .....	lungos
77	high point of land .....	tangos
78	point of land between two rivers .....	imus
79	strait .....	kipot
80	marsh .....	lati

81	marshland .....	latian
82	pond .....	salog
83	lake .....	lawà
84	lagoon .....	lanaw
85	bay .....	loók
86	gulf .....	hinloloók
87	pool .....	dagát-dagátan
88	sea .....	dagat
89	ocean .....	karagatán, hinaragat
90	river .....	ilog
91	creek .....	ilat
92	stream .....	sapà
93	spring .....	batis
94	rivulet .....	ilúg-ilugan, pasalangí
95	brook .....	saimsim
96	brackish, briny (adj.) .....	matabsíng
97	brackish water .....	matabsíng na tubig
98	brackishness .....	katabsingán
99	aquarium .....	isdaan
100	fishpond .....	páisdaan
101	fish culture .....	paláisdaan
102	swamp .....	pinak
103	swampland .....	pinakan
104	moor .....	labon (NSL)
105	moorland .....	labunan
106	fen .....	tunlak, tanlak, tarlak
107	fenland .....	katunlakan, katanlakan, katarlakan
108	cloud .....	alapaap
109	dark cloud .....	maitím na alapaap, dagim
110	fog .....	ulap
111	smog .....	ulop ( <i>ulap</i> + <i>usok</i> )
112	dew .....	hamóg
113	moisture .....	halumigmíg
114	humidity .....	dimíg
115	mountain range .....	tagaytáy
116	mountainous .....	bulubundukin
117	fill, pile, mound .....	binundók
118	cave, cavern .....	yungíb
119	crater .....	lungaw
120	burrow .....	lunggâ
121	offshore, high seas .....	laot
122	igneous rock .....	apuying bató

<b>123</b>	sedimentary rock .....	tinginging bató
<b>124</b>	metamorphic rock .....	banyuhing bató
<b>125</b>	petrogenic cycle .....	mulímbatuhing saulit
<b>126</b>	avenue .....	kabulusan, abenida
<b>127</b>	highway .....	lansangan
<b>128</b>	boulevard .....	bulebard
<b>129</b>	street .....	daán
<b>130</b>	bog .....	tumok
<b>131</b>	mire, quagmire .....	timak, timakan
<b>132</b>	quicksand .....	kuminoy, kulunoy, kumunoy
<b>133</b>	estuary (of a rive) .....	wawa
<b>134</b>	delta (of a river) .....	delta
<b>135</b>	desert .....	iláng, tahik
<b>136</b>	Geology Division .....	Sangáy ng Dalúbdútaan

## SIGMUAN

(Mechanics)

1	machine (1)	mákiná
2	machine (2) (contrivance)	sigmô (isig + himò)
3	machine (v.)	sigmuín
4	device	pakasám (Mat. Tag.)
5	mechanism (system)	(palá) sigmuan
6	mechanism (part of a machine)	panigmô
7	machinery	kasigmuán
8	mechanic	máninigmô, mekánikó
9	mechanical	sigmuin, masigmô
10	mechanize (v.)	sasigmuín
11	mechanization	sasigmô
12	mechanically	pasigmô
13	engineering	agsikapan
14	engineer	agsikap
15	quick action mechanism	daglimò
16	automatic (adj.)	sárimuin
17	automatic mechanism	sarimò
18	interrelated motions of mechanisms	gamláy
19	simple machine	payák na sigmô
20	lever	dalawit
21	inclined plane	dahilig
22	wedge	singkál
23	screw	balukay
24	pulley	kalô
25	wheel	gulóng, aríring
26	wheel and axle	gulóng at gargaran
27	flywheel	iikot
28	shaft	tandós
29	spindle	paikit
30	weight (part of a machine)	pabigát
31	counterweight	gantímbigát
32	lubrication	danlóg (Bis.)
33	lubricate (v.)	danlugán
34	lubricant	padanlóg
35	bushing	saklâ
36	bearing	saló
37	ball bearing	bilang saló

38	roller bearing	gúlunging saló
39	support (n.)	sapó, panapó
40	support (v.)	sapuhín
41	holder	panangan
42	joint, union (n.)	sugpóng
43	seam, lap joints	bitík
44	seam, butt joints	sudlóng
45	fastening, binding	daling
46	lashing	bangot
47	bolt, latch	kunsí (Mat. Tag.)
48	dais, platform	tarima
49	corrugated	palutpót
50	hammer	palumbakal, pamukpók
51	chisel	paít
52	crowbar	landók
53	handbarrow, wheelbarrow	bitlág
54	rotor	painog
55	stator	patigil
56	stationary machine	sigmóng dígalâ
57	mobile machine	sigmóng galâ
58	rice mill	bígasan
59	rice huller	kiskisan
60	separator (rice mill)	táhipan
61	winning blower	hungkuyan
62	sieve	bistay
63	hammer mill	dikdikan
64	sugar mill	kabyawan
65	sugar mill roll	álilisán
66	abaca stripper	hagután
67	decorticator	luknapan
68	crusher	dáguldulán
69	grinder	gilingán
70	pulverizer	durugán
71	circulating apron	balikang tugdayan
72	horizontal plank	higáng tabla
73	vibrating sifter	tigtigan
74	disintegrator (oil mill)	ligisán
75	rolling mill (steel)	lumahán
76	chute	dágusdusán
77	dryer (natural)	pátuyuán
78	dryer (artificial), dessicator	ígahan
79	press	hapitán
80	mechanical press	sigmuing hapitán

<b>81</b>	hydraulic (adj.) .....	dánumin
<b>82</b>	hydraulic press .....	dánuming hapitán
<b>83</b>	screw press .....	bálukayíng hapitán
<b>84</b>	stamping press .....	panakang (pantakang) hapitán
<b>85</b>	crane .....	tipól
<b>86</b>	stationary crane, derrick crane .....	dígaláng tipól
<b>87</b>	traveling crane, mobile crane .....	galáng tipól
<b>88</b>	boom .....	dukláy
<b>89</b>	tractor .....	guyod (Bis.)
<b>90</b>	angledozer .....	pahilís-sudsód
<b>91</b>	grader .....	pamantáy
<b>92</b>	scraper .....	pangayod
<b>93</b>	bulldozer .....	pamungkál-sudsód
<b>94</b>	excavator .....	pamungkál
<b>95</b>	car (gen. sense) .....	batlág
<b>96</b>	motor car .....	isugáng batlág
<b>97</b>	engine .....	likhisog ( <i>likha + ísog</i> )
<b>98</b>	diesel engine .....	likhisog-disel
<b>99</b>	gasoline engine .....	likhisog-gasolina
<b>100</b>	steam engine .....	likhisog-tubngáw
<b>101</b>	cylinder (of an engine) .....	bumbóng (ng isáng likhisog)
<b>102</b>	head (cylinder head) .....	ulumbumbóng, ulo
<b>103</b>	piston .....	tublík ( <i>tulak-balík</i> )
<b>104</b>	piston pin .....	busól-tublík
<b>105</b>	piston ring .....	singsíng-tublík
<b>106</b>	hoop .....	bagwáy
<b>107</b>	cylinder liner .....	bagwáy ng bumbóng, bagwáy
<b>108</b>	cylinder bore .....	ukab ng bumbóng
<b>109</b>	liner bore .....	ukab ng bagwáy
<b>110</b>	engine block .....	lawas ng likhisog
<b>111</b>	combustion chamber .....	líyaban
<b>112</b>	connecting rod .....	panikad
<b>113</b>	crankshaft .....	tandós-sikarán, sikarán
<b>114</b>	connecting rod bearing .....	salóng panikad
<b>115</b>	crankshaft bearing .....	salóng sikarán
<b>116</b>	gasket .....	sapín
<b>117</b>	piston pin bushing .....	saklâ ng busól-tublík
<b>118</b>	cam .....	umbók
<b>119</b>	camshaft .....	tandós-umbók
<b>120</b>	eccentric .....	luwastúngain
<b>121</b>	cooling system .....	kaayusáng palamíg
<b>122</b>	fuel system .....	kaayusáng gatong

123	lubricating system .....	kaayusáng padanlóg
124	oil cooler .....	palamíg-langís
125	fuel oil .....	langís-gatong
126	lubricating oil .....	langís-padanlóg
127	throttle .....	panubò
128	valve .....	tudláng ( <i>tulot-hadláng</i> )
129	inlet (intake) valve .....	pasukáng tudláng
130	outlet valve .....	lábasang tudláng
131	exhaust valve .....	púlasang tudláng
132	manifold .....	sangahán
133	inlet (intake) manifold .....	pasukáng sangahán
134	exhaust manifold .....	lábasang sangahán
135	heat exchanger .....	pamálitang-init
136	magneto .....	balnitab ( <i>balaning-dagitab</i> )
137	ignition .....	duóp
138	ignition system .....	kaayusáng duóp
139	ignition wiring .....	kakawaráng duóp
140	ignition coil .....	kikíd-duóp
141	electrical system .....	kaayusáng dagitbín
142	distributor .....	balahagì
143	diagram .....	gúhitin
144	wiring diagram .....	kakawaráng gúhitin
145	schematic diagram .....	kábitang gúhitin
146	switch (elec.) .....	kabtól ( <i>kabít-putol</i> )
147	vapor .....	singáw
148	carburetor .....	paningáw
149	suction .....	suyop
150	carburetion and suction system .....	kaayusáng paningáw at panuyop
151	mixture .....	halò
152	air-gasoline mixture .....	haluáng hangin-gasolina
153	air-gasoline ratio .....	tagwáy ng hangin-gasolina
154	spark plug .....	pasak-panduóp
155	storage battery .....	tinggalitab ( <i>tinggalang dagitab</i> )
156	starter .....	pamulâ
157	electric motor .....	dagisog ( <i>dagitab + isog</i> )
158	starter motor .....	dagisog-pamulâ
159	pump .....	siglóy ( <i>isig + daloy</i> )
160	fuel pump .....	siglóy-gatong
161	water pump .....	siglóy-tubig
162	pump house .....	pasigluyan
163	lubricating oil pump .....	siglóy ng langís-padanlóg
164	rubber hose .....	tubong goma
165	oil pan .....	sahod-langís

166	filter .....	panalà
167	oil filter .....	panalang-langís
168	air filter .....	panalang-hangin
169	compressor .....	panipíl
170	air compressor .....	panipíl-hangin
171	clutch .....	daklót
172	spare .....	timbós (PSL)
173	spare part .....	bahaging timbós
174	repair .....	pag-ayo
175	repair shop .....	áyuhan
176	maintenance .....	pánatamán
177	gauge .....	pansukod
178	oil temperature gauge .....	pansukod-kaintánlangís
179	oil pressure gauge .....	pansukod-díinlangís
180	voltmeter .....	boltsukod
181	ammeter .....	amsukod
182	fuel gauge .....	pansukod-gatong
183	engine repair stand .....	bastagang-áyuhan ng likhisog
184	radiator .....	tungalat ( <i>tungâ + kalat</i> )
185	incubator (for babies) .....	limliman
186	incubator (for eggs) .....	pámisaán
187	hatchery .....	hálimhiman
188	watch, timepiece .....	orasán
189	clock .....	taknaan
190	chronometer .....	tiónsukat
191	rotation .....	inog
192	right hand rotation .....	pakanang inog
193	left hand rotation .....	pakaliwáng inog
194	clockwise rotation .....	pataknaang inog
195	counterclockwise rotation .....	balitaknaang inog
196	tachometer .....	inugsukat
197	tachograph .....	inugtalâ
198	engine analyzer .....	panuring-aral ng likhisog
199	fatigue (in metals) .....	pagál
200	strength (of materials) .....	tibay
201	endurance .....	panagál
202	endurance stress (Sn.) .....	panagál ng sidhî
203	stress (in metals) .....	sidhî
204	endurance stress limit .....	hanggán ng panagál na sidhî
205	ultimate stress .....	sukdulang sidhî
206	yield stress .....	pugtuang sidhî
207	working stress .....	panggawaing sidhî

<b>208</b>	design stress .....	antangan sidhî
<b>209</b>	wheel .....	gulóng
<b>210</b>	hub .....	gigitnâ
<b>211</b>	spoke .....	lihít
<b>212</b>	cutting edge .....	binsál
<b>213</b>	steel .....	paslíp
<b>214</b>	forge (v.) .....	batbatín
<b>215</b>	forge (n., a workshop) .....	batbatan
<b>216</b>	forge shop .....	pabatbatan
<b>217</b>	forging (n.) .....	binatbát
<b>218</b>	temper (n.) .....	subo
<b>219</b>	temper (v.) .....	subuhan
<b>220</b>	tempered .....	sinubuhan
<b>221</b>	tempering plant .....	pasubuhan
<b>222</b>	tempered steel .....	sinubuhang paslíp
<b>223</b>	defect .....	kapintasan
<b>224</b>	damage .....	pinsalà
<b>225</b>	breakdown .....	sirâ, kasiraán

# AGBARUGAN

(Architecture)

1	architecture .....	agbarugan ( <i>aghám + barog + -an</i> )
2	architect .....	agbarog
3	architectural form .....	barog (Sgb.)
4	ordinary form .....	anyô
5	lean-to .....	dalungdong, kalambakod, lango-lango, kuba-kob, palirong
6	hut .....	dampâ, kubo
7	house (rural) .....	baláy
8	house (urban) .....	bahay
9	mansion .....	himbabahay
10	building .....	gusalì
11	storey .....	palapág
12	basement .....	silong
13	upper deck, roof deck .....	hinlalapág
14	beam .....	sepo
15	support of crossbeam .....	tahilan, biga
16	roof .....	bubóng
17	roof base .....	bubungán
18	eaves, gable .....	sulambí
19	crossbeam .....	balagbág ( <i>trabisanyô</i> )
20	rafter, crossbeam .....	balakilan, barakilan
21	ridge of the roof .....	ulumbubóng, palupo, palupuhan (JVP 337)
22	mortise (along side of wood board) .....	utab, kutab, akab, lukad, ukab, ukit (JVP 341)
23	joist .....	haligi
24	foyer .....	úlutan
25	hall .....	bulwagan
26	eaves .....	balísbisan, sibe
27	roof frame .....	balangkás (NSL), salawag

# 4

## KAPNAYAN

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Lahatáng Kapnayaning Katawagán . . . . .	121
Kapnayaning Kayarián . . . . .	128
Súriing Kapnayan . . . . .	132
Haying Kapnayan . . . . .	135
Dagikapnayan . . . . .	137
Búturaning Kapnayan . . . . .	139
Mgá Batás, Símulain at Hunà . . . . .	141
Kálalangíng Kapnayan . . . . .	142
Ang mgá Mulangkáp . . . . .	145
Mgá Lárawaníng Katawagán at Kangalanán ng mgá Kapnaying Sangkáp . . . . .	148
Mgá Panambál para sa Kapnayaning Kangalanán . . . . .	149
Dagipik at Mulipon ng mgá Balangkáp . . . . .	150
Kangalanán ng mgá Díhaying Balangkáp . . . . .	152
Kangalanán ng mgá Haying Balangkáp . . . . .	155

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## LAHATÁNG KAPNAYANING KATAWAGÁN

(General Terminology in Chemistry)

1	substance, material .....	sangkáp
2	raw material .....	hiláw na sangkáp
3	chemistry, the chemical sciences .....	kapnayan (sangkáp + hánayan)
4	general chemistry .....	lahatáng kapnayan
5	analytical chemistry .....	súriing kapnayan
6	qualitative chemistry .....	úriing kapnayan
7	quantitative chemistry .....	súkating kapnayan
8	organic chemistry .....	haying kapnayan
9	inorganic chemistry .....	dihaying kapnayan
10	physical chemistry .....	liknaying kapnayan
11	industrial chemistry .....	kálalanging kapnayan
12	biochemistry .....	háykapnayan
13	electrochemistry .....	dagikapnayan
14	nuclear chemistry .....	búturaning kapnayan
15	atomics .....	mulpikan
16	nucleonics .....	búturán
17	surface chemistry .....	dáyaging kapnayan
18	chemical (adj., 1) .....	kapnayin
19	chemical (adj., 2) .....	kapnayanin
20	chemical (n.) .....	sangkapin
21	chemist (scientist) .....	kapnayanon
22	chemist (registered) .....	mángangapnáy
23	chemistry graduate .....	tapós-kapnayan
24	word equation .....	salitáng tumbasan
25	formula equation .....	sanyóng tumbasan
26	chemical equation .....	kapnayaning tumbasan
27	balanced equation .....	timbang na tumbasan
28	balance the equation .....	isatimbang ang tumbasan
29	change .....	bayló (Bis.)
30	physical change .....	liknaying bayló
31	chemical change .....	kapnaying bayló
32	action .....	bilos ( <i>bisà + kilos</i> )
33	activity .....	kabilusan
34	reaction .....	balibilos
35	reactivity .....	kabalibilusan
36	chemical reactivity .....	kapnaying kabalibilusan
37	reactive .....	mabalibilos

38	reagent	pamalibilos
39	reactant	kabalibilos
40	original reactant	múlaing kabalibilos
41	product (of a reaction)	bunga
42	types of chemical reactions	mgá uri ng kapnaying balibilos
43	decomposition (chem. process)	pagbungkág, pagkábungkág
44	decompose (v.)	bungkagín, mabungkág
45	composition reaction	pasangkáp na balibilos
46	decomposition reaction	pabungkág na balibilos
47	replacement reaction	palitambaling balibilos
48	double decomposition reaction	dalwahang pabungkág na balibilos
49	reduction (chem.)	hidagisik
50	reduce	hidagisikin
51	reducing agent	hidágisikíng kinabisà
52	oxidation (chem.)	sadagisik
53	oxidize (chem.)	sadagisikin
54	reduction-oxidation reaction	hidagisik-sadagisik na balibilos
55	redox	hisadagisik
56	dissolve	lusawin
57	dissolved	lusáw
58	deliquescence	tagitubig
59	deliquescent	tagitúbigin
60	efflorescence	halintubig
61	efflorescent	halintúbigin
62	concentration (gen.)	lapot
63	concentrate (n.)	lapót
64	concentrate (v.)	palaputin
65	solution (chem.)	kaluswán (kalusawán)
66	concentrated solution	malapot na kaluswán
67	diluted solution	binantuáng kaluswán, malabnâw na kaluswán
68	aqueous solution	túbiging kaluswán
69	solid solution	siksíng kaluswán
70	liquid solution	dánuming kaluswán
71	solubility	kaluswinán (kalusawinán)
72	viscous	malapuyot
73	viscosity	lapuyot
74	pure	tagnás (taganás)
75	pure substance	tagnás na sangkáp
76	impure substance	dítagnás na sangkáp
77	purity	katagnasán
78	nonpurity	díkatagnasán
79	impurity	kadítagnasán
80	purification	pagtagnás

81	purify .....	tagnasín
82	refined (adj.) .....	dalisay, dinalisay
83	refine (v.) .....	dalisayin
84	decant .....	itigis
85	supernatant liquid .....	tináw
86	sediment .....	tinging
87	sedimentation .....	patining
88	filtration .....	pagsalà, pananalà
89	filter (n.) .....	panalà
90	filter (v.) .....	saláin
91	filtered .....	salâ
92	residue (of filtration) .....	nasalà
93	residue (of evaporation) .....	tirá
94	filtrate (n.) .....	sinalà
95	filtrable .....	masasalà
96	process (internal action) .....	saayos
97	filtering process .....	panalang saayos
98	filtering medium .....	panalang talaytayan
99	filter paper .....	panalang papél
100	funnel .....	balisunsóng
101	filtering funnel .....	panalang balisunsóng
102	precipitation .....	sahimuô ( <i>sa-</i> + <i>hi-</i> + <i>buô</i> )
103	precipitate (n.) .....	himuô
104	precipitate (v.) .....	himuuín
105	separation .....	sahiwaláy
106	precipitation and separation .....	sahimuô at sahiwaláy
107	coagulation .....	samuô ( <i>sa-</i> + <i>buô</i> )
108	coagulate (v.) .....	pamuuín
109	coagulant .....	pampamuô
110	evaporation .....	hisingáw
111	evaporate (v.) .....	hisingawín
112	evaporative .....	hisingawin
113	vaporization .....	sasingáw
114	vaporize (v.) .....	sasingawín
115	distillation .....	singáwkintáy
116	distill .....	singáwkintayín
117	distillate .....	siningáwkintáy, sinintáy
118	vacuum .....	awángin
119	vacuum distillation .....	awánging singáwkintáy
120	condensation .....	sakintáy
121	condenser .....	pangintáy (pangkintáy)
122	condense .....	kintayín, kumintáy

123	condensate .....	kinintáy
124	condensable .....	makintáy
125	noncondensable .....	dímakintáy
126	sublimation .....	lakdasingáw (lakdawsingáw)
127	sublimate .....	lakdasingawín
128	boiling (n.) .....	pagkulô
129	ebullition .....	pagkukumulô
130	fusion (mech.) .....	pamumuók
131	boiling point .....	tungos ng pagkulô
132	melting point .....	tungos ng pagkátunaw
133	fusion point .....	tungos ng pamumuók
134	heat .....	init
135	heat of vaporization .....	init ng sasingáw
136	heat of reaction .....	init ng balibilos
137	formation .....	sabuô
138	heat of formation .....	init ng sabuô
139	stability of a compound .....	katatagán ng isáng balangkáp
140	energy of reaction .....	kusóg ng balibilos
141	heat energy .....	íning kusóg
142	energy change .....	bayló ng kusóg
143	exothermic reaction .....	luwás-íning balibilos
144	endothermic reaction .....	sukúg-íning balibilos
145	exothermic solution .....	luwás-íning kaluswán
146	endothermic solution .....	sukúd-íning kaluswán
147	melt (with heat) .....	tunawin
148	smelt (separate metals from their ores) .....	tugnawín
149	liquefaction .....	sadanúm
150	liquefy .....	sadanumín
151	solidification .....	sasiksín
152	solidify .....	sasiksinín
153	gasification .....	sabuhág
154	gasify .....	sabuhagín
155	ideal gas .....	uliráng buhág
156	non-ideal gas .....	díuliráng buhág
157	liquid air .....	hanging danúm
158	liquefied air .....	hanging dinanúm
159	vapor .....	singáw
160	vapor pressure .....	síngawing díin
161	vapor phase .....	síngawing yugtô
162	steam .....	tubngáw ( <i>tubig + singáw</i> )
163	steam pressure .....	tubngawing díin
164	ionization (of gases) .....	sadagipik
165	ionize .....	sadagipikin

166	diffusion (chem.)	panunuót
167	diffuse	manuót
168	dispersion	pagkalat
169	disperse	pakalatin
170	dispersion medium	talaytayan ng pagkalat
171	dispersed system	kaayusáng kalát
172	dispersed phase	kalát na yugtô
173	tension	igtíng
174	surface tension	dáyaging igtíng
175	dissolved substance	sangkáp na lusáw
176	insoluble substance	dilusawíng sangkáp
177	settle (v.)	tumining
178	suspension (chem.)	kabitnán (kabitinan)
179	suspended matter	butáng na bitín
180	colloid	maládigkít
181	colloidal	maládigkitin
182	colloidal suspension	maládigkiting kabitnán
183	colloidal solution (sol)	maládigkiting kaluswán
184	colloidal system	kaayusáng maládigkitin
185	colloidal state	maládigkiting himtáng
186	lyophilic colloid	danúmhiguming maládigkít
187	hydrophilic colloid	túbighiguming maládigkít
188	lyophobic colloid	danúmsikwaying maládigkít
189	hydrophobic colloid	túbigsikwaying maládigkít
190	emulsion	lapunáw
191	emulsoid	malálapnáw
192	suspensoid	malábitín
193	mixture	halungkáp ( <i>haluáng sangkáp</i> )
194	homogeneity	tulád-urì
195	homogeneous	tulád-úriin
196	homogeneous mixture	tulád-úriing halungkáp
197	heterogeneity	dam-urì
198	heterogeneous	dam-úriin
199	heterogeneous mixture	dam-úriing halungkáp
200	uniform (pert. to structure) (adj.)	sanyusin ( <i>isáng + ayos + -in</i> )
201	uniformity	kasanyusán
202	uniform distribution	sanyusing pamámahagi
203	crystal	bubog
204	crystalline	búbugin
205	crystalline structure	búbuging kayarián
206	crystallize	sabubugin, masabubog, isabubog
207	crystallization	sabubog

<b>208</b>	water of crystallization .....	tubig ng sabubog
<b>209</b>	crystallography .....	talábubugán
<b>210</b>	crystalloid .....	malábubog
<b>211</b>	crystalliferous .....	palábubog
<b>212</b>	seeding .....	pagbibinhî
<b>213</b>	hygroscopy .....	paghulas
<b>214</b>	hygroscopic .....	húlasin
<b>215</b>	specific property .....	hambinging kaangkinán
<b>216</b>	hydrolysis .....	tubigbilos
<b>217</b>	hydrolyze (v.) .....	tubigbilusin
<b>218</b>	pyrolysis .....	apúybilos
<b>219</b>	physical process .....	liknaying saayos
<b>220</b>	theoretical process .....	húnaíng saayos
<b>221</b>	experiment .....	tiláw (Bis.)
<b>222</b>	form (v.) (a product) .....	sabuuín, sumabuô (ang isáng bunga)
<b>223</b>	liberation (of a gas) .....	pagluwás (ng isáng buhág)
<b>224</b>	treat (a substance with another) .....	sampawán (ng isáng sangkáp ang ibá)
<b>225</b>	yield (a product) .....	maghatag (ng isáng bunga)
<b>226</b>	replacement .....	palítambál ( <i>palít + tambál</i> )
<b>227</b>	replace (a substance) .....	palítambalán
<b>228</b>	displacement .....	halítambál ( <i>halíp + tambál</i> )
<b>229</b>	displace (a substance) .....	halítambalán
<b>230</b>	general form .....	lahatáng anyô
<b>231</b>	chemical calculation .....	kapnaying pagtayà
<b>232</b>	driving force of a reaction .....	budlunging isig ng isáng balibilos
<b>233</b>	catalysis .....	ganápbilos
<b>234</b>	catalyst, catalyzer, catalytic agent .....	pangganápbilos
<b>235</b>	inhibition .....	sansalà
<b>236</b>	inhibit (v.) .....	sansalain
<b>237</b>	inhibitor .....	panansalà
<b>238</b>	active .....	mabilos
<b>239</b>	active material .....	mabilos na sangkáp
<b>240</b>	inactive material .....	dímabilos na sangkáp
<b>241</b>	inert .....	matigál
<b>242</b>	inert material .....	matigál na sangkáp
<b>243</b>	active element .....	mabilos na mulangkáp
<b>244</b>	inactive element .....	dímabilos na mulangkáp
<b>245</b>	active metal (nonmetal) .....	mabilos na metál (dímetál)
<b>246</b>	inactive metal (nonmetal) .....	dímabilos na metál (dímetál)
<b>247</b>	alkali metal .....	alkáng metál
<b>248</b>	simultaneity .....	santaknâ
<b>249</b>	simultaneous .....	santaknain
<b>250</b>	simultaneously .....	pasantaknâ

<b>251</b>	simultaneous reactions .....	mgá santaknaing balibilos
<b>252</b>	hypoacidity .....	kubúskaasdán
<b>253</b>	hypoalkalinity .....	kubúskaalkahán
<b>254</b>	hypoactivity .....	kubúskabilusan
<b>255</b>	hyperacidity .....	sukdúlkaasdán
<b>256</b>	hyperalkalinity .....	sukdúlkaalkahán
<b>257</b>	hyperactivity .....	sukdúlkabilusan
<b>258</b>	fire .....	apóy
<b>259</b>	burning .....	pagkásunog, pagsunog
<b>260</b>	combustion .....	liyáb, pagliliyáb
<b>261</b>	spontaneous combustion .....	kusang-liyáb
<b>262</b>	combustible (n.) .....	liyabín
<b>263</b>	combustible (adj.) .....	maliyáb
<b>264</b>	ignition .....	duóp
<b>265</b>	kindling .....	pagduóp
<b>266</b>	ignition point .....	tungos ng duóp
<b>267</b>	kindling point .....	tungos ng pagduóp
<b>268</b>	flash (of combustion) .....	sikláb
<b>269</b>	flash point .....	tungos ng sikláb
<b>270</b>	flash (of light) .....	kisláp
<b>271</b>	smoldering .....	paglalatang, naglálataáng
<b>272</b>	flame .....	ningas
<b>273</b>	flammable .....	níngasin
<b>274</b>	incandescence .....	pagbabaga
<b>275</b>	incandescent .....	nagbabaga
<b>276</b>	iridescence .....	silák (Bis.), kasilakán
<b>277</b>	iridescent .....	masilák
<b>278</b>	phosphorescence .....	pospowanag ( <i>pósporús + liwanag</i> )
<b>279</b>	phosphorescent .....	mapospowanag
<b>280</b>	luminescence .....	sanag (Bis.), kasanagan
<b>281</b>	luminescent .....	masanag
<b>282</b>	diaphanous .....	masilim
<b>283</b>	explosion .....	putók, pagputók
<b>284</b>	explode .....	pamutók, paputukín
<b>285</b>	detonation .....	pagdikláp
<b>286</b>	detonate .....	padiklapín
<b>287</b>	blast .....	buga
<b>288</b>	blasting .....	sabuga

## KAPNAYANING KAYARIÁN

(Chemical Structure)

1	structure .....	kayarián
2	chemical structure .....	kapnayaning kayarián
3	substance .....	sangkáp
4	chemical element, element .....	mulangkáp ( <i>múlaang sangkáp</i> )
5	chemical compound, compound .....	balangkáp ( <i>tambalang sangkáp</i> )
6	simple compound .....	payák na balangkáp
7	complex compound .....	hugnáy na balangkáp
8	metallic element .....	metalhíng mulangkáp
9	nonmetallic element .....	dímetalhíng mulangkáp
10	covalent compound .....	kakalwingíng balangkáp
11	ionic compound .....	dágipikíng balangkáp
12	compounds of iron, etc. ....	mgá balangkáp ng bakal, atb.
13	mixture .....	halungkáp
14	organic .....	hayin
15	inorganic .....	díhayin
16	chemical symbol (notation) .....	kapnayaning halat
17	formula .....	sanyô
18	chemical formula .....	kapnayaning sanyô
19	structural formula .....	yáriing sanyô
20	empirical formula .....	másiring sanyô
21	molecular formula .....	mulatlíng sanyô
22	chemical bond .....	kapnayaning bigkís
23	Chemical Bond Approach .....	Kapnaying-Bigkís na Aral
24	CBA .....	KBA
25	valence .....	kalwíng ( <i>kalawit + kawíng</i> )
26	ion .....	dagipik ( <i>dagitab + tipik</i> )
27	radical .....	múlipon ( <i>múlaang lipon</i> )
28	negative radical .....	balíng na múlipon
29	positive radical .....	tahás na múlipon
30	component, ingredient .....	kasangkáp
31	constituent .....	kalangkáp
32	composition .....	kasangkapán
33	chemical composition .....	kapnayaning kasangkapán
34	molecular composition .....	mulatlíng kasangkapán
35	state .....	himtáng (Hlg.)
36	solid state .....	siksinińg himtáng
37	liquid state .....	dánuming himtáng

38	gaseous state	búhaging himtáng
39	plasmatic state	dinagipik na himtáng
40	oxidation state	sadágisíking himtáng
41	allotrope	kamulkáp ( <i>kasama + mulangkáp</i> )
42	allotropy, allotropism	kamulkapanan
43	atom	múlapik
44	atomics	mulpikan
45	particle	tipik
46	molecule	múlatil
47	isotope	kahasík
48	atomic shell	mulpikníng balok
49	inner (outer) shell	panloób (panlabás) na balok
50	periodicity	pagkáúlitin
51	periodic	ulitin
52	periodic classification	úlitíng paláurian
53	periodic table	taláulitán
54	periodic property	úlitíng kaangkinán
55	sequence of atoms	datig ng mgá múlapik
56	covalence	kakalwíng
57	coordinate covalence	tambíngang kakalwíng
58	electropositivity	kadagítahasán
59	electronegativity	kadagíbalíngán
60	formal charge	anyuing tabláy
61	shared electron	pinagsaluhang dagisik
62	sharing of electrons, electron sharing	sáluhang-dagisik
63	transfer of electrons, electron transfer	sálinang-dagisik
64	gain of electrons, electron gain	pakinabang sa dagisik
65	loss of electrons, electron loss	pangungulang sa dagisik
66	ion-electron method	pamamaraáng dagipik-dagisik
67	monoatomic hydrogen	sangmulpikníng haydrohén
68	diatomic hydrogen	dalmulpikníng haydrohén
69	molecular hydrogen	mulatlíng haydrohén
70	probability distribution of electrons	kalagmitaning pamámahagì ng mgá dagisik
71	the Rutherford experiment	ang tiláw ni Rutherford
72	zinc sulfide screen	tabíng na sink sulpád
73	lead shield	sanggáng tinggâ
74	foil	palará
75	gold foil	gintóng palarâ
76	amperage	kaampirán
77	voltage	kabolthán
78	threshold voltage	gíling kabolthán
79	electron volt	dagisik-bolt
80	coulombic force	kulomhíng isig

<b>81</b>	ionization energy .....	sadágipikáng kusóg
<b>82</b>	specific ionization energy .....	hambinging sadágipikáng kusóg
<b>83</b>	energy barrier .....	kúsuging hadláng
<b>84</b>	charged cloud .....	tinablayáng ulap
<b>85</b>	electron cloud .....	dagisik-ulap
<b>86</b>	electron charge cloud .....	dagisik-tabláy na ulap
<b>87</b>	symmetrical electron cloud .....	parianyuin na dagisik-ulap
<b>88</b>	asymmetrical electron cloud .....	díparianyuin na dagisik-ulap
<b>89</b>	metallic bond .....	metalhíng bigkís
<b>90</b>	massive crystal .....	búgating bubog
<b>91</b>	binding force .....	mabigkising isig
<b>92</b>	disruption (n.) .....	pagkáwislák
<b>93</b>	disrupt (v.) .....	wislakín
<b>94</b>	disruptive force .....	mawislakíng isig
<b>95</b>	effusion .....	panlalagós
<b>96</b>	effusion rate .....	kabilsán ng panlalagós
<b>97</b>	polarity .....	kataluktukán
<b>98</b>	bond polarity .....	kataluktukán ng bigkís
<b>99</b>	polar molecule .....	táluktuking múlatil
<b>100</b>	polarize .....	sataluktukín
<b>101</b>	polarizable molecule .....	múlatil na masasataluktók
<b>102</b>	polar covalent bond .....	táluktuking kakalwingíng bigkís
<b>103</b>	dipole .....	daltaluktók
<b>104</b>	polar force .....	táluktuking isig
<b>105</b>	spectrum, spectra .....	balangáw
<b>106</b>	mass spectroscopy .....	bugát-balngawsípatan
<b>107</b>	mass spectrometer .....	bugát-balngawsukat
<b>108</b>	atomic weight scale .....	talásukatán ng mulpikníng bigát
<b>109</b>	spherical model (pattern) .....	timbúluging hulwaran
<b>110</b>	orbital (n.) .....	lígiranán
<b>111</b>	orbital (adj.) .....	lígiranín
<b>112</b>	orbital model .....	lígiraníng hulwaran
<b>113</b>	orbital model of the atom .....	lígiraníng hulwaran ng múlapik
<b>114</b>	Bohr model of the atom .....	hulwarang Bohr ng múlapik
<b>115</b>	Bohr-Rutherford model of the atom .....	hulwarang Bohr-Rutherford ng múlapik
<b>116</b>	electron-cloud model of the atom .....	hulwarang dagisik-ulap ng múlapik
<b>117</b>	Neon Atom Model .....	Hulwarang-Múlapik ng Neyón
<b>118</b>	ammonia molecule model .....	hulwarang-múlatil ng amonya
<b>119</b>	electron configuration .....	kalarawnán ng dagisik
<b>120</b>	tetrahedral arrangement .....	patdáyaging ayos
<b>121</b>	isoelectronic .....	kadágisikin
<b>122</b>	isoelectronic molecules .....	mgá múlatil na kadágisikin

123	electron energy level .....	kapantayan ng kusóg-dagisik
124	gross energy level .....	kabuuáng kapantayan ng kusóg
125	apparent energy level .....	waring kapantayan ng kusóg
126	energy sublevel .....	kubkapantayan ng kusóg
127	quantum (unit of energy) .....	kuwantum
128	quantum (level of energy) .....	damò (Bis.)
129	quanta .....	mgá damò
130	quantum number .....	dámuing bilang
131	first quantum level .....	unang dámuing kapantayan
132	first period, second period, etc. ....	unang ulit, ikalawáng ulit, atb.
133	electron pair .....	kapid-dagisik
134	hydration .....	sahaydrát
135	path of reaction .....	landás ng balibilos
136	energy diagram .....	gúhitin ng kusóg
137	bond energy .....	bigkising kusóg
138	organization energy .....	satataging kusóg
139	formation energy .....	sabuóng kusóg
140	free energy .....	malayang kusóg
141	reaction energy .....	balibilusing kusóg
142	activation .....	sabilos
143	activate .....	sabilusin
144	activated state .....	sinabilós na himtáng
145	catalytic activity .....	ganápbilusing kabilusan
146	activation energy .....	sabilusing kusóg
147	potential energy .....	bíning kusóg
148	kinetic energy .....	kílusing kusóg
149	energy of reactants .....	kusóg ng mgá kabalibilos
150	energy of products .....	kusóg ng mgá bunga
151	energy liberated .....	kusóg na iniluwás
152	energy absorbed .....	kusóg na sinigom

## SÚRIING KAPNAYAN

(Analytical Chemistry)

1	analytical chemistry .....	súriing kapnayan
2	qualitative chemistry .....	úriing kapnayan
3	quantitative chemistry .....	súkating kapnayan
4	formula weight .....	sanyuing bigát
5	molecular weight .....	mulatlíng bigát
6	atomic weight .....	mulpikníng bigát
7	equivalent .....	kahalgá
8	equivalent weight .....	kahalgáng bigát
9	combining (equivalent) weight .....	lákiping bigát
10	gram-atom (unit) .....	gramo-múlapik, gram-atom
11	gram-atomic .....	gramo-mulpiknín
12	Avogadro's Number .....	Abogadrong Bilang, Bilang ni Avogadro
13	gram-formula weight .....	gramo-sanyuing bigát
14	gram-molecular weight .....	gramo-mulatlíng bigát
15	gram-atomic weight .....	gramo-mulpikníng bigát
16	gram-equivalent weight .....	gramo-kahalgáng bigát
17	percentage composition .....	bahagdang kasangkapán
18	chemically pure .....	kapnaying tagnás
19	solution .....	kaluswán
20	solute .....	nilusaw, lulusawin
21	solvent .....	panlusaw
22	soluble .....	lusawín
23	slightly soluble .....	bahagyánlusawín
24	moderately soluble .....	tamtaminlusawín
25	very soluble .....	napakálusawín
26	difficulty soluble .....	hiraplusawín
27	insoluble .....	dílusawín
28	solubility .....	kaluswinán
29	miscibility (n.) .....	kahalwinán
30	miscible (adj.) .....	haluín
31	miscible liquid .....	haluíng danúm
32	partially miscible liquid .....	pabahaging haluíng danúm
33	completely miscible liquid .....	ganáp na haluíng danúm
34	saturated .....	tigmák
35	saturate .....	tigmakín
36	dilute (adj.) .....	binantuán, malabnaw
37	dilute (v.) .....	bantuán, palabnawín

38	diluent	pambantô, pampalabnâw
39	neutral (adj.)	awanlíng ( <i>awáng kiling, waláng kiling</i> )
40	neutralize	awanlíngin
41	neutralizer	pang-awanlíng
42	neutral substance	awanlíng na sangkáp
43	neutral solution	awanlíng na kaluswán
44	standard solution	pamantayang kaluswán
45	dilute solution	binantuáng kaluswán, malabnâw na kaluswán
46	weak solution	matabáng na kaluswán
47	saturated solution	tigmák na kaluswán
48	supersaturated solution	higtigmák na kaluswán
49	concentration (anal.)	damsík ( <i>dami + siksík</i> )
50	concentrate (v.)	damsikín
51	concentrated solution	madamsík na kaluswán
52	increase the concentration	pataasín ang damsík
53	molar solution	molníng kaluswán
54	normal solution	dániwing kaluswán
55	molal solution	molhíng kaluswán
56	mole	mol
57	molarity <i>M</i>	kamolnihán
58	normality <i>N</i>	kadaniwán
59	molality <i>m</i>	kamolhán
60	molar concentration	molníng damsík
61	normal concentration	dániwing damsík
62	molal concentration	molhíng damsík
63	hydrogen ion concentration	damsík ng haydrohéng dagipik
64	speed-up (accelerate) a reaction	pabilisín ang isáng balibilos
65	slow-down (retard) a reaction	pabagalín ang isáng balibilos
66	speed of a reaction	bilís ng isáng balibilos
67	collision of molecules	banggaan ng mgá múlatil
68	interaction	tambilos ( <i>tambíng + kilos</i> )
69	direction of reaction	tungo ng balibilos
70	forward reaction	pasulóng na balibilos
71	backward reaction	pauróng na balibilos
72	reverse reaction	tumbalik na balibilos
73	reversible reaction	tumbálíking balibilos
74	irreversible reaction	dítumbálíking balibilos
75	equilibrium reaction	katiningang balibilos
76	dissociation (ionization of solutions)	hipisan
77	dissociation (ionization) constant	hipísaning lágiin
78	proportionality constant	kahagwayaning lágiin
79	equilibrium constant	katiningang lágiin
80	ionization constant	sadágipikáng lágiin

- 81** ebullioscope (n.) ..... kulúnsipat  
**82** ebullioscopic (adj.) ..... kulúnsipatin

## HAYING KAPNAYAN

(Organic Chemistry)

1	organic .....	hayin
2	organic chemistry .....	haying kapnayan
3	inorganic .....	díhayin
4	isomer .....	kasanyô (kaisáng anyô)
5	cyclic .....	salkupin (salikupin)
6	cyclic compound .....	salkuping balangkáp
7	acyclic .....	awánsalkupin
8	acyclic compound .....	awánsalkuping balangkáp
9	heterocyclic .....	damsalkupin
10	carbocyclic .....	karbosalkupin
11	homocyclic .....	tuládsalkupin
12	aliphatic .....	malátábain
13	aromatic .....	sangháyain
14	alkaloid .....	maláalká
15	alkaloidal .....	maláalkahin
16	wax, beeswax .....	pagkít
17	paraffin .....	malápagkít
18	paraffin series .....	dalayráy ng malápagkít
19	hydrocarbon .....	haydrokarbón
20	saturated hydrocarbon .....	tigmák na haydrokarbón
21	unsaturated hydrocarbon .....	dítigmák na haydrokarbón
22	homologous series of hydrocarbons .....	dalayráy na magkakatulad na haydrokarbón
23	methane series .....	dalayráy ng metán
24	carbohydrate .....	karbohaydrát
25	biochemistry .....	háykapnayan
26	biochemical .....	háykapnayin
27	biochemist .....	háykapnayanon
28	biochemical process .....	háykapnaying saayos
29	digestion .....	satunaw
30	absorption .....	pagsigom
31	circulation .....	paglibot
32	excretion (system) .....	pálúwasan
33	excretion (excreta) .....	luwás
34	metabolism .....	kapbisà (sangkáp + bisà)
35	anabolism .....	kapyarì
36	catabolism .....	kapsirà
37	imbibition .....	pamiminúm (minúm, Kpn.)

38	osmosis .....	pananagós
39	diffusion (chem.) .....	panunuót
40	diffuse .....	manuót
41	oxidation (chem.) .....	sadagisik
42	oxidize (chem.) .....	sadagisikin
43	reduction (chem.) .....	hidagisik
44	reduce (chem.) .....	hidagisikin
45	oxidation number .....	bilang ng sadagisik
46	oxidizing agent, oxidant .....	sadágisikíng kinabisà
47	autoxidation .....	sarídagisik
48	hydrogenate .....	haydrohinán
49	hydrogenation .....	sahaydrohén
50	dehydrogenate .....	hihaydrohinán
51	dehydrogenation .....	hihaydrohén
52	hydrolysis .....	tubigbilos
53	hydrolyze (v.) .....	tubigbilusin
54	autolysis .....	saríbilos
55	decay (first, odoriferous stage) .....	pagkábulók
56	decay (final, non-odoriferous stage) .....	pagkádunot
57	decomposition (natural process) .....	pagkáagnás
58	decomposition (chem. process) .....	pagbungkág, pagkábungkág
59	cracking .....	pagbaák, pagkábaák
60	fermentation .....	pamamanis, pagkápanis
61	ferment (n.) .....	pamanis
62	ferment (v.) .....	panisin
63	fermented .....	panís, pinanis
64	amino acid .....	amino asid
65	chlorophyll .....	luntíndinsól
66	chloroplast .....	luntíkatwán
67	xanthophyll .....	diláwdinsól
68	mitochondria, chondriosome .....	sulídlawas

## DAGIKAPNAYAN

(*Electrochemistry*)

1	electrochemistry .....	dagikapnayan
2	electron .....	dagisik (Mat. Tag.)
3	electronic structure .....	dágisikíng kayarián
4	electrovalence .....	dagikalwíng
5	ion .....	dagipik
6	positive ion .....	tahás na dagipik
7	negative ion .....	balíng na dagipik
8	anion .....	tahapik ( <i>tahás + tipik</i> )
9	cation .....	balipik ( <i>balíng + tipik</i> )
10	anode .....	tahandás ( <i>tahás + dagindás</i> )
11	cathode .....	balindás ( <i>balíng + dagindás</i> )
12	ionic bond .....	dágipikíng bigkís
13	covalent bond .....	kakalwingíng bigkís
14	ionic equation .....	dágipikíng tumbasan
15	ionic substance .....	dágipikíng sangkáp
16	ionized substance .....	dinagipik na sangkáp
17	ionic exchange .....	pálitang-dagipik
18	dissociation (ionization of solutions) .....	hipisan
19	dissociation (ionization) constant .....	hipísaning lágiin
20	hydrogen ion .....	haydrohéng dagipik
21	pH value .....	halgáng pH
22	pH of a solution .....	pH ng isáng kaluswán
23	electrolyte .....	dagilusáw
24	nonelectrolyte .....	dídagilusáw
25	electrolysis .....	dagibilos
26	electrolytic (1) .....	dagibílusin
27	electrolytic (2) .....	dagilúsawin
28	electrochemical equivalent .....	dagikapnaying kahalgá
29	potential (physics) .....	kaigtingán
30	electric potential .....	dagitbíng kaigtingán
31	ionization potential .....	sadágipikáng kaigtingán
32	critical potential .....	maselang kaigtingán
33	critical point .....	maselang tungos
34	potential difference .....	kaibhán ng kaigtingán
35	voltage .....	kabolthán
36	amperage .....	kaampirán
37	strong electrolyte .....	matapang na dagilusáw

<b>38</b>	weak electrolyte .....	matabáang na dagilusáw
<b>39</b>	electromotive (adj.) .....	dagisáluyin
<b>40</b>	electromotive series .....	dagisáluying dalayráy
<b>41</b>	electropositive .....	dagitahás
<b>42</b>	electronegative .....	dagibalíng
<b>43</b>	electropositivity .....	kadagítahasán
<b>44</b>	electronegativity .....	kadagíbalingán
<b>45</b>	free energy .....	maláyang kusóg
<b>46</b>	activation .....	sabilos
<b>47</b>	activation energy .....	sabilusing kusóg
<b>48</b>	activate .....	sabilusin
<b>49</b>	activated state .....	sinabilós na himtáng
<b>50</b>	catalytic activity .....	ganápbilusing kabilusan
<b>51</b>	activity series .....	dalayráy ng kabilusan
<b>52</b>	activity series of metals (nonmetals) .....	dalayráy ng kabilusan ng mgá metál (dímetál)

## BÚTURANING KAPNAYAN

(Nuclear Chemistry)

1	nuclear chemistry .....	búturaning kapnayan
2	nucleonics .....	búturán
3	nucleus .....	butód
4	plasma (phys.) .....	dinagipik
5	plasmatic state .....	dinagipik na himtáng
6	proton .....	múlasik
7	positron .....	tahasik
8	meson .....	tungapik
9	alpha particle .....	tipik-alpa
10	beta particle .....	tipik-beta
11	alpha ray .....	sinag-alpa
12	gamma ray .....	sinag-gama
13	alpha radiation .....	dagiláp-alpa
14	beta radiation .....	dagiláp-beta
15	gamma radiation .....	dagiláp-gama
16	deuterium .....	duiriyum
17	deuteron .....	duteron
18	heavy water .....	tubig na mabigát
19	heavy hydrogen .....	haydrohéng mabigát
20	accelerator .....	pandarasisg
21	betatron .....	pandarasisg-beta, bétatrón
22	cosmotron .....	pandarasisg-mayaw, kósmotrón
23	cyclotron .....	pandarasisg-ikit, sáyklotrón
24	Van de Graaff accelerator .....	pandarasisg Van de Graaff
25	linear accelerator .....	túwiring pandarasisg
26	atom smasher .....	pamungkág-múlapik
27	bombardment .....	tampól, pagtampól
28	nuclear bombardment .....	tampól-butód
29	breeder .....	panuplíng
30	Cerenkov radiation .....	dagiláp-Cerenkov
31	source of radiation .....	batis ng dagiláp
32	chain reaction .....	patanikaláng tambisà
33	reactor (nuclear) .....	tambísaan
34	thermonuclear .....	ínitbutudnín
35	thermonuclear reaction .....	ínitbutudníng tambisà
36	fission (nuclear) .....	pagsipák
37	fissionable .....	sípakín

38	fusion (nuclear) .....	pagpisan, sapisan
39	stable .....	matatág
40	unstable .....	dímatatág
41	shield .....	sanggá
42	slug .....	putol
43	tracer .....	pambakás
44	radioisotope .....	dagilápkahasík
45	pitchblende .....	pitsblen
46	pile .....	talaksán
47	photoelectric effect .....	sugadagitbing tambisà
48	monitor .....	panubaybáy
49	moderator .....	panamtám
50	röntgen .....	róndiyén
51	milliröntgen .....	kaliboróndiyén, miliróndiyén
52	ionization chamber .....	padágipikán
53	cloud chamber .....	páulapán
54	Geiger counter .....	pamilang-Geiger
55	half-life .....	kalahatímbuhay
56	dosimeter .....	tambádsukod
57	control rod .....	tandós-panupil
58	converter .....	pamalinyô
59	core .....	ubod
60	critical mass .....	maselang bigát
61	critical state .....	maselang himtáng
62	decay (of atoms) .....	pugnáw
63	cobalt-60 .....	kobalt-60
64	free energy exchange .....	pálitan ng maláyang kusóg

## MGÁ BATÁS, SÍMULAIN AT HUNÀ

*(Laws, Principles and Theories)*

1	Law of Periodicity .....	Batás sa Kaulitan (Úliting Batás)
2	Law of Definite Proportions .....	Batás sa mgá Turíng na Hagwáy
3	Law of Partition .....	Batás sa Paghahatì
4	Law of Mass Action .....	Batás sa Búgating Bilos
5	Law of Partial Pressures .....	Batás sa mgá Bahaging Diín
6	Pauli Exclusion Principle .....	Símulaing Hisama ni Pauli
7	Ionization Theory .....	Sadágipikáng Hunà
8	Quantum Theory .....	Dámuing Hunà
9	Atomic Theory .....	Mulpikníng Hunà
10	Molecular Orbital Theory .....	Mulatlíng Lígiraníng Hunà
11	Mole Concept .....	Dalumat sa Mol
12	Law of Combining Weights .....	Batás sa Lákiping Bigát
13	Boyle's Law of Gases .....	Batás sa Buhág ni Boyle
14	Charles' Law of Gases .....	Batás sa Buhág ni Charles
15	Gay-Lussac's Law of Combining Volumes ....	Batás sa Lákiping Buók ni Gay-Lussac
16	Fundamental Gas Laws .....	Mgá Batayáng Batás sa Buhág
17	Heisenberg Uncertainty Principle .....	Símulain sa Díkatiyakán ni Heisenberg
18	Schrödinger Wave Equation .....	Líbuying Tumbasan ni Schrödinger
19	Brønsted-Lowry Concept of Acids and Bases .	Dalumat sa Asid at Tangkáp niná Brønsted-Lowry
20	Modern Theory of Ionization .....	Makabagong Hunà sa Sadigipik
21	Kinetic Molecular Theory .....	Kilusin-Mulatlíng Hunà
22	van der Waals Equation .....	Tumbasan ni van der Waals
23	Le Chatelier's Principle .....	Símulain ni Le Chatelier
24	Bohr Concept .....	Dalumat ni Bohr
25	Avogadro's Law .....	Batás ni Avogadro

# KÁLALANGÍNG KAPNAYAN

(Industrial Chemistry)

1	industrial chemistry .....	kálalangíng kapnayan
2	to produce (a substance) .....	lalangín ang, lumaláng ng (isáng sangkáp)
3	formation (of a substance) .....	saanyô (ng isáng sangkáp)
4	reactor (chem.) .....	tambílusan
5	reactor (ord.) .....	panambilos
6	generator (of substances) .....	liksangkáp
7	hydrogen generator .....	liksangkáp ng haydrohén
8	gas generator .....	liksangkáp ng buhág
9	steam generator .....	liksangkáp ng tubngáw
10	steam engine .....	likhisog tubngáw
11	chemical process .....	kapnaying saayos
12	chemical processing .....	kapnaying sáayusán
13	technical process .....	aghímuíng saayos
14	experimental process .....	tílawíng saayos
15	industrial process .....	kálalangíng saayos
16	commercial process .....	kálakalíng saayos
17	practical process .....	maisásagawáng saayos
18	Haber process .....	saayos Haber
19	smelting process .....	tugnawíng saayos
20	complete process .....	ganáp na saayos
21	incomplete process .....	díganáp na saayos
22	fractional distillation .....	báhagihíng singáwkintáy
23	destructive distillation .....	mapanirang singáwkintáy
24	evaporator .....	hisingawan
25	vaporizer .....	pansasingáw
26	distillery .....	paningáwkintáy
27	condenser .....	pangintáy (pangkintáy)
28	purifier .....	panagnás,tagnasan
29	refinery .....	páddalisayán
30	sedimentation basin .....	patiningan
31	filter (filtering equip.) (n.) .....	salaán
32	precipitator .....	panghimuô
33	coagulator .....	pámuuán
34	potency (of liquors) .....	pahang (JVP, 207)
35	igniter .....	panduóp
36	ignition system .....	kaayusáng-duóp
37	explosive .....	pútukin

38	detonator .....	pandikláp
39	blast (explosion) (n.) .....	sabog
40	blast (v.) .....	pasábugin
41	gasification .....	sabuhág
42	cracking .....	pagbaák, págkabaák
43	cracking plant .....	pábaakán
44	blast (of air) .....	dagisdís
45	blast furnace .....	dágisdising dapugán
46	steel .....	paslíp (llk.)
47	casting (n.) .....	binubò
48	cast iron .....	binubong bakal
49	scrap iron .....	waksíng bakal
50	casting mold .....	bubuán
51	foundry .....	pábuuán
52	pig ingot .....	inilik
53	pig iron .....	ilik-bakal
54	ingot mold .....	ilikán
55	pig iron plant .....	páilikán
56	smelter .....	tugnawan
57	smelting plant .....	pátugnawán
58	rolling mill (steel) .....	lumahán
59	rolling mill plant .....	pálumahán
60	mine (v.) .....	dukalín
61	mine (n.) .....	dúkalan, mina
62	ore .....	dúkalin
63	iron ore .....	dúkaling bakal
64	copper ore .....	dúkaling tansô
65	metallic ore .....	dúkaling metál
66	nonmetallic ore .....	dúkaling dímetál
67	mineral .....	lupangkáp ( <i>lupang sangkáp</i> )
68	mineralogy .....	lupangkapan
69	metallurgy .....	bálahakán
70	reduction (met.) .....	hioksád, hitambál
71	reduce (v.) (met.) .....	hioksadín, hitambalín
72	reducing agent (met.) .....	hitambaling kinabisá
73	oxidation (met.) .....	saoksád, satambál
74	oxidize (met.) .....	saoksadín, satambalín
75	reduction-oxidation reaction (met.) .....	balibilos na hitambál-satambál
76	direct reduction method (met.) .....	pamamaraáng túwirang hitambál
77	reduction furnace (met.) .....	hitambaling dapugán
78	electric reduction furnace (met.) .....	dagitbíng hitambaling dapugán
79	oxyacetylene .....	oksásetilina
80	alcohol .....	alkuhól

<b>81</b>	benzine .....	bensína
<b>82</b>	gasoline .....	gasolína
<b>83</b>	kerosene .....	kerosén, gaás

## ANG MGÁ MULANGKÁP

(The Elements)

1	hydrogen	..... H	.....	haydrohén
2	helium	..... He	.....	helyum
3	lithium	..... Li	.....	lityum
4	beryllium	..... Be	.....	berilyum
5	boron	..... B	.....	borón
6	carbon	..... C	.....	karbón
7	nitrogen	..... N	.....	nitrohén
8	oxygen	..... O	.....	oksihén
9	fluorine	..... F	.....	plorín
10	neon	..... Ne	.....	neyón
11	sodium ( <i>natrium</i> )	..... Na	.....	sodyum
12	magnesium	..... Mg	.....	magnisyum
13	aluminum	..... Al	.....	alúminum
14	silicon	..... Si	.....	silikón
15	phosphorus	..... P	.....	pósporús
16	sulfur	..... S	.....	asupre, malilang, sulphúr
17	chlorine	..... Cl	.....	klorín
18	argon	..... Ar	.....	argón
19	potassium ( <i>kalium</i> )	..... K	.....	potasyum
20	calcium	..... Ca	.....	kalsiyum
21	scandium	..... Sc	.....	iskándiyum
22	titanium	..... Ti	.....	titanyum
23	vanadium	..... V	.....	banadyum
24	chromium	..... Cr	.....	kromyum
25	manganese	..... Mn	.....	mángganís
26	iron ( <i>ferrum</i> )	..... Fe	.....	bakal
27	cobalt	..... Co	.....	kobalt
28	nickel	..... Ni	.....	nikel
29	copper ( <i>cuprum</i> )	..... Cu	.....	tansô
30	zinc	..... Zn	.....	sink
31	gallium	..... Ga	.....	galyum
32	germanium	..... Ge	.....	hermanyum
33	arsenic	..... As	.....	arseník
34	selenium	..... Se	.....	selenyum
35	bromine	..... Br	.....	bromín
36	krypton	..... Kr	.....	kriptón
37	rubidium	..... Rb	.....	rubidyum

38	strontium	.....Sr	.....	istróntiyum
39	yttrium	.....Y	.....	ítriyum
40	zirconium	.....Zr	.....	sirkonyum
41	niobium	.....Nb	.....	nayobyum
42	molybdenum	.....Mo	.....	molíbdenúm
43	technetium	.....Tc	.....	teknisyum
44	ruthenium	.....Ru	.....	rutenyum
45	rhodium	.....Rh	.....	rodyum
46	palladium	.....Pd	.....	paladyum
47	silver ( <i>argentum</i> )	.....Ag	.....	pilak
48	cadmium	.....Cd	.....	kádmiyum
49	indium	.....In	.....	índiyum
50	tin ( <i>stannum</i> )	.....Sn	.....	tinggaputî
51	antimony ( <i>stibium</i> )	.....Sb	.....	antímoní
52	tellurium	.....Te	.....	teluryum
53	iodine	.....I	.....	yodín
54	xenon	.....Xe	.....	senón
55	cesium	.....Cs	.....	sesyum
56	barium	.....Ba	.....	baryum
57	lanthanum	.....La	.....	lántanúm
58	cerium	.....Ce	.....	seryum
59	praseodymium	.....Pr	.....	praseyodimyum
60	neodymium	.....Nd	.....	neyodimyum
61	promethium	.....Pm	.....	prometyum
62	samarium	.....Sm	.....	samaryum
63	europium	.....Eu	.....	yuropyum
64	gadolinium	.....Gd	.....	gadolinyum
65	terbium	.....Tb	.....	térbiyum
66	dysprosium	.....Dy	.....	disprosyum
67	holmium	.....Ho	.....	hólmiyum
68	erbium	.....Er	.....	érbiyum
69	thulium	.....Tm	.....	tulyum
70	ytterbium	.....Yb	.....	itérbiyum
71	lutetium	.....Lu	.....	lutesyum
72	hafmium	.....Hf	.....	hápnium
73	tantalum	.....Ta	.....	tántalúm
74	tungsten ( <i>wolfram</i> )	.....W	.....	tangsten
75	rhenium	.....Re	.....	renyum
76	osmium	.....Os	.....	ósmiyum
77	iridium	.....Ir	.....	iridyum
78	platinum	.....Pt	.....	plátinum
79	gold ( <i>aurum</i> )	.....Au	.....	gintō
80	mercury ( <i>hydrargyrum</i> )	.....Hg	.....	asoge

81	thallium .....	Tl .....	talyum
82	lead ( <i>plumbum</i> ) .....	Pb .....	tinggâ
83	bismuth .....	Bi .....	bismút
84	polonium .....	Po .....	polonyum
85	astatine .....	At .....	astatín
86	radon .....	Rn .....	radón
87	francium .....	Fr .....	pransiyum
88	radium .....	Ra .....	radyum
89	actinium .....	Ac .....	aktinyum
90	thorium .....	Th .....	toryum
91	protactinium .....	Pa .....	protaktinyum
92	uranium .....	U .....	uranyum
93	neptunium .....	Np .....	neptunyum
94	plutonium .....	Pu .....	plutonyum
95	americium .....	Am .....	amerisyum
96	curium .....	Cm .....	kuryum
97	berkelium .....	Bk .....	berkelyum
98	californium .....	Cf .....	kalipórniyum
99	einsteinium .....	Es .....	enstenyum
100	fermium .....	Fm .....	permiyum
101	mendelevium .....	Md .....	mendelebyum
102	nobelium .....	No .....	nobelyum
103	lawrencium .....	Lw .....	lawrensiyum
104	rutherfordium .....	Rf .....	ruterpórdiyum*
105	dubnium .....	Db .....	dúbniyum*
106	seaborgium .....	Sg .....	sibórgiyum*
107	bohrium .....	Bh .....	boryum*
108	hassium .....	Hs .....	hasyum*
109	meitnerium .....	Mt .....	metneryum*
110	darmstadtium .....	Ds .....	darmistádtiyum*
111	roentgenium .....	Rg .....	róndiyényum*
112	copernicium .....	Cn .....	kopérnisyum*
113	nihonium .....	Nh .....	nihonyum*
114	flerovium .....	Fl .....	plerobyum*
115	moscovium .....	Mc .....	moskobyum*
116	livermorium .....	Lv .....	libérmoryum*
117	tennessine .....	Ts .....	tenesín*
118	oganeson .....	Og .....	oganesón*

\*Isinama ng may-sipì bilang makábagong katawagán

# MGÁ LÁRAWANÍNG KATAWAGÁN AT KANGALANÁN NG MGÁ KAPNAYING SANGKÁP

*(Descriptive Terms and Nomenclature of Chemical Substances)*

1	alkali .....	alká
2	alkaline .....	maalká
3	alkaline substance .....	maalkáng sangkáp
4	alkalinity .....	kaalkahán
5	alkalize .....	alkahín
6	dealkalize .....	hialkahín
7	acid .....	asid
8	acidic .....	maasid
9	acidic substance .....	maasid na sangkáp
10	acidity .....	kaasdán, pagkáasid
11	acidify .....	asidín, gawíng asid
12	deacidify .....	hiasidín, hiasidán
13	acid-forming .....	paláasid
14	base (chem.) .....	tangkáp ( <i>takad na sangkáp</i> )
15	basic (chem.) .....	tangkapin
16	basic substance .....	tangkaping sangkáp
17	basicity .....	katangkapán
18	neutral substance .....	awanlíng na sangkáp
19	neutralize .....	awanlingín
20	salt, NaCl (ordinary) .....	asín
21	salt (in general) .....	inasín
22	metal .....	metál
23	nonmetal .....	dímetál
24	metallic .....	metalhín
25	nonmetallic .....	dímetalhín
26	halogen .....	hálohén
27	ammonia .....	amonya
28	anhydrous (adj.) .....	awánhaydrohán
29	anhydrite (min.), anhydrous calcium sulfite ...	awánhaydrít, awánhaydroháng kalsiyum sulpít
30	fluorite (min.), calcium fluoride, CaF <sub>2</sub> .....	plorito, kalsiyum ploríd
31	ozone, O <sub>3</sub> .....	oson
32	silica .....	sílíka
33	oxyacid .....	oksíasid
34	vitamin .....	síglamin
35	protein .....	protin
36	yeast .....	pamuklad

# MGÁ PANAMBÁL PARA SA KAPNAYANING KANGALANÁN

*(Combining Forms for Chemical Compounds)*

1	-ide .....	-ád
2	-ate .....	-át
3	-ite .....	-ít
4	-ous .....	-ós
5	-ic .....	-ik
6	-ium .....	-(i)yum
7	-lysis .....	-bilos
8	-yl .....	-íl
9	-ane .....	-án
10	-ene .....	-ín
11	-yne .....	-áin
12	-diene .....	-dyen
13	-ol .....	-ól
14	-al .....	-ál
15	-oic .....	-oik
16	-oxy, oxy- .....	-oksí, oksí-
17	-oate .....	-oat
18	-one .....	-on
19	hypo- .....	kubús-
20	per- .....	hig-
21	iso- .....	ka-
22	thio- .....	malíl-, malíla-
23	acetyl- .....	asetíl-
24	aceto- .....	aseto-
25	amido- .....	amido-
26	amino- .....	amino-
27	anhydro- .....	awánhaydro-
28	ortho- .....	daniw-
29	meta- .....	hangu-
30	para- .....	tapát-
31	pyro- .....	apúy-
32	cyclo- .....	salkú-

# DAGIPIK AT MULIPON NG MGÁ BALANGKÁP

(Ions and Radicals of Compounds)

## MGÁ TAHÁS NA DAGIPIK AT MULIPON

(Positive Ions and Radicals)

1	oxonium .....	$R_2OH^+$ .....	oksonyum
2	hydronium .....	$H_3O^+$ .....	haydronyum
3	ammonium .....	$NH_4^+$ .....	amonyum
4	nitrous .....	$N^{3+}$ .....	nitros
5	nitric .....	$N^{5+}$ .....	nitrik
6	cuprous .....	$Cu^+$ .....	kupros
7	cupric .....	$Cu^{2+}$ .....	kuprik
8	ferrous .....	$Fe^{2+}$ .....	peros
9	ferric .....	$Fe^{3+}$ .....	perik
10	hypochlorous .....	$HOCl^+$ .....	kubúskloros
11	hypochloric .....	$HOCl^+$ .....	kubúsklorik
12	phosphorous .....	$H_3PO_3$ .....	posporós
13	hypophosphorous .....	$H_3PO_2$ .....	kubúsposporós
14	phosphoric .....	$H_3PO_4$ .....	posporík
15	hypophosphoric .....	$H_4P_2O_6$ .....	kubúsposporik
16	pyrophosphoric .....	$H_4P_2O_7$ .....	apúyposporik
17	metaphosphoric .....	$HPO_3$ .....	hanguposporik
18	orthophosphoric .....	$H_3PO_4$ .....	daniwposporik
19	monosodium .....	$Na^+$ .....	sansodyum
20	thionic .....	$H_2S_nO_6$ .....	malílangin
21	acetic .....	$CH_3COOH$ .....	asetik
22	amino .....	.....	amino
23	primary .....	.....	pángunahin
24	secondary .....	.....	pángalwahin
25	tertiary .....	.....	pángatluhin
26	alkyl .....	$-C_nH_{2n+1}$ .....	alkíl
27	methyl .....	$-CH_3$ .....	metíl
28	ethyl .....	$-C_2H_5$ .....	etil
29	propyl .....	$-C_3H_7$ .....	propíl
30	butyl .....	$-C_4H_9$ .....	byutíl
31	pentyl .....	$-C_5H_{11}$ .....	limtíl
32	dimethyl .....	$CH_3-R-CH_3$ .....	dalmetíl
33	triethyl .....	.....	tat-etíl
34	acetyl .....	$CH_3CO-$ .....	asetíl

## MGÁ BALÍNG NA DAGIPIK AT MULIPON

(Negative Ions and Radicals)

1	oxide	$\text{O}^{2-}$	oksád
2	monoxide	$-\text{O}$	sanuksád
3	dioxide	$-\text{O}_2$	daluksád
4	trioxide	$-\text{O}_3$	tatluksád
5	peroxide	$\text{R}-\text{O}-\text{O}-\text{R}$	higuksád
6	hydride	$\text{H}^-$	haydrád
7	hydroxide	$\text{OH}^-$	haydruksád
8	hydroxyl, hydroxy	$-\text{OH}$	haydruksíl
9	carbonate	$\text{CO}_3^{2-}$	karbonát
10	carbide	$\text{C}^{4-}$	karbád
11	nitride	$\text{N}^{3-}$	nitrád
12	nitrate	$\text{NO}_3^-$	nitrát
13	nitrite	$\text{NO}_2^-$	nitrít
14	sulfide	$\text{S}^{2-}$	sulpád
15	sulfate	$\text{SO}_4^{2-}$	sulpát
16	persulfate	$\text{SO}_5^{2-}$	higsulpát
17	thiosulfate	$\text{S}_2\text{O}_3^{2-}$	malílsulpát
18	sulfite	$\text{SO}_3^{2-}$	sulpít
19	halide	$\text{MX}$	halád
20	chloride	$\text{Cl}^-$	klorád
21	chlorate	$\text{ClO}_3^-$	klorát
22	perchlorate	$\text{ClO}_4^-$	higklorát
23	chlorite	$\text{ClO}_2^-$	klorít
24	hypochlorite	$\text{ClO}^-$	kubúsklorít
25	bromide	$\text{Br}^-$	bromád
26	bromate	$\text{BrO}_3^-$	bromát
27	iodide	$\text{I}^-$	yodád
28	fluoride	$\text{F}^-$	plorád
29	cyanide	$\text{CN}^-$	siyanád
30	cyanate	$\text{NCO}^-$	siyanát
31	zincate	$\text{Zn}(\text{OH})_4^{2-}$	singkát
32	platinate	$\text{Pt}(\text{OH})_6^{2-}$	platinát
33	manganate	$\text{MnO}_4^{2-}$	mangganát
34	permanganate	$\text{MnO}_4^-$	higmangganát
35	phosphate	$\text{PO}_4^{3-}$	pospát
36	antimonate	$\text{SbO}_4^{3-}$	antimonát
37	arsenate	$\text{AsO}_4^{3-}$	arsenát
38	thioarsenate	$\text{AsS}_4^{3-}$	malílarсенát
39	calcite		kalsít
40	acetate	$\text{C}_2\text{H}_3\text{O}_2^-$	asetát

# KANGALANÁN NG MGÁ DÍHAYING BALANGKÁP

(Nomenclature of Inorganic Compounds)

1	carbon monoxide	..... CO	.....	karbón sanuksád
2	carbon dioxide	..... CO <sub>2</sub>	.....	karbón daluksád
3	carbon tetrachloride	..... CCl <sub>4</sub>	.....	karbón patklorád
4	sodium oxide	..... Na <sub>2</sub> O	.....	sodyum oksád
5	sodium chloride	..... NaCl	.....	sodyum klorád
6	sodium sulfite	..... Na <sub>2</sub> SO <sub>3</sub>	.....	sodyum sulpít
7	sodium hydroxide	..... NaOH	.....	sodyum haydruksád
8	sodium sulfate	..... Na <sub>2</sub> SO <sub>4</sub>	.....	sodyum sulpát
9	sodium peroxide	..... Na <sub>2</sub> O <sub>2</sub>	.....	sodyum higuksád
10	sodium thiosulfate	..... Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	.....	sodyum malílsulpát
11	sodium nitrate	..... NaNO <sub>3</sub>	.....	sodyum nitrát
12	sodium phosphate	.....	.....	sodyum pospát
13	sodium bicarbonate	..... NaHCO <sub>3</sub>	.....	sodyum dalkarbonát
14	sodium hexametaphosphate	..... (NaPO) <sub>36</sub>	.....	sodyum nimhangupospát
15	sodium tripolyphosphate	..... Na <sub>5</sub> P <sub>3</sub> O <sub>10</sub>	.....	sodyum tatdampospát
16	monosodium phosphate	..... NaH <sub>2</sub> PO <sub>4</sub>	.....	sansodyum pospát
17	disodium phosphate	..... Na <sub>2</sub> HPO <sub>4</sub>	.....	dalsodyum pospát
18	sulfur dioxide	..... SO <sub>2</sub>	.....	sulpur daluksád
19	sulfur trioxide	..... SO <sub>3</sub>	.....	sulpur tatluksád
20	sulfuric acid	..... H <sub>2</sub> SO <sub>4</sub>	.....	sulpurik asid
21	hydrochloric acid	..... HCl	.....	haydroklorik asid
22	potassium chloride	..... KCl	.....	potasyum klorád
23	potassium chlorate	..... KClO <sub>3</sub>	.....	potasyum klorát
24	potassium iodide	..... KI	.....	potasyum yodád
25	potassium nitrate	..... KNO <sub>3</sub>	.....	potasyum nitrát
26	potassium hydroxide	..... KOH	.....	potasyum haydroksád
27	potassium sulfate	..... K <sub>2</sub> SO <sub>4</sub>	.....	potasyum sulpád
28	potassium carbonate	..... K <sub>2</sub> CO <sub>3</sub>	.....	potasyum karbonát
29	potassium bromide	..... KBr	.....	potasyum bromád
30	potassium cyanide	..... KCN	.....	potasyum siyanád
31	potassium chloroplatinate	..... KClPt	.....	potasyum kloroplatinát
32	manganese dioxide	..... MnO <sub>2</sub>	.....	mangganís daluksád
33	calcium chloride	..... CaCl <sub>2</sub>	.....	kalsiyum klorád
34	calcium carbide	..... CaC <sub>2</sub>	.....	kalsiyum karbád (karburo)
35	calcium carbonate	..... CaCO <sub>3</sub>	.....	kalsiyum karbonát (marmól)
36	calcium bicarbonate	..... Ca(HCO <sub>3</sub> ) <sub>2</sub>	.....	kalsiyum dalkarbonát
37	magnesium oxide	..... MgO	.....	magnesyum oksád

38	ammonium chloride	$\text{NH}_4\text{Cl}$	amonyum klorád
39	ammonium hydroxide	$\text{NH}_4\text{OH}$	amonyum haydruksád
40	ammonium nitrate	$\text{NH}_4\text{NO}_3$	amonyum nitrát
41	ammonium sulfate	$(\text{NH}_4)_2\text{SO}_4$	amonyum sulpát
42	ammonium cyanate	$\text{NH}_4\text{OCN}$	amonyum siyanát
43	iron (III) oxide, ferric oxide	$\text{Fe}_2\text{O}_3$	bakal (III) oksád, perík oksád
44	iron (II) oxide, ferrous oxide	$\text{FeO}$	bakal (II) oksád, perós oksád
45	iron disulfide	$\text{FeS}$	bakal dalsulpád
46	nitric oxide	$\text{NO}$	nitrík oksád
47	nitrous oxide	$\text{N}_2\text{O}$	nitrós oksád
48	nitrogen dioxide	$\text{NO}_2$	nitrohén daluksád
49	nitrogen trioxide	$\text{NO}_3$	nitrohén taluksád
50	nitric anhydride	$\text{N}_2\text{O}_5$	nitrík awánhaydrád
51	nitric acid	$\text{HNO}_3$	nitrík asid
52	nitrous acid	$\text{HNO}_2$	nitrós asid
53	phosphine	$\text{PH}_3$	pospín
54	phosphonium chloride	$(\text{HOCH}_2)_4\text{PCl}$	posponyum klorád
55	phosphoric oxide	$\text{P}_2\text{O}_5$	posporik asid
56	orthophosphoric acid	$\text{H}_3\text{PO}_4$	daniwposporik asid
57	phosphoric acid	$\text{H}_3\text{PO}_4$	posporik asid
58	metaphosphoric acid	$\text{HPO}_3$	hanguposporik asid
59	pyrophosphoric acid	$\text{H}_4\text{P}_2\text{O}_7$	apúyposporik asid
60	hypophosphoric acid	$\text{H}_4\text{P}_2\text{O}_6$	kubúposporik asid
61	phosphorous acid	$\text{H}_3\text{PO}_3$	pósporós asid
62	hypophosphorous acid	$\text{H}_3\text{PO}_2$	kubúposporós asid
63	primary phosphate		pángunahing pospát
64	secondary phosphate		pángalwahing pospát
65	tertiary phosphate		pángatluhing pospát
66	superphosphate		higpospát
67	tribasic acid		tattangkaping asid
68	cupric oxide	$\text{CuO}$	kuprik oksád
69	hydrogen peroxide	$\text{H}_2\text{O}_2$	haydrohén higuksád
70	barium peroxide	$\text{BaO}_2$	baryum higuksád
71	mercuric oxide	$\text{HgO}$	merkurik oksád
72	aluminum oxide	$\text{Al}_2\text{O}_3$	alúminúm oksád
73	lithium oxide	$\text{Li}_2\text{O}$	lityum oksád
74	lithium carbonate	$\text{Li}_2\text{CO}_3$	lityum karbonát
75	lithium hydroxide	$\text{LiOH}$	lityum haydruksád
76	lithium hydride	$\text{LiH}$	lityum haydrád
77	boron hydride	$\text{BH}_3$	borón haydrád
78	acid anhydride		asidíng awánhaydrád
79	basic anhydride		tangkaping awánhaydrád
80	thionic acid		malílanging asid

- 81 acetic acid .....  $\text{CH}_3\text{COOH}$  ... asethíng asid  
82 amino acid ..... amino asid

# KANGALANÁN NG MGÁ HAYING BALANGKÁP

(Nomenclature of Organic Compounds)

## ANG MGÁ ALKÁN

(The Alkanes)

1	methane	.....CH <sub>4</sub> .....	metán
2	ethane	.....C <sub>2</sub> H <sub>6</sub> .....	etán
3	propane	.....C <sub>3</sub> H <sub>8</sub> .....	propán
4	butane	.....C <sub>4</sub> H <sub>10</sub> .....	byután
5	pentane	.....C <sub>5</sub> H <sub>12</sub> .....	limtán
6	hexane	.....C <sub>6</sub> H <sub>14</sub> .....	nimtán
7	heptane	.....C <sub>7</sub> H <sub>16</sub> .....	pittán
8	octane	.....C <sub>8</sub> H <sub>18</sub> .....	waltán
9	nonane	.....C <sub>9</sub> H <sub>20</sub> .....	samtán
10	decane	.....C <sub>10</sub> H <sub>22</sub> .....	pultán
11	undecane	.....C <sub>11</sub> H <sub>24</sub> .....	labin-istán
12	duodecane	.....C <sub>12</sub> H <sub>26</sub> .....	labindaltán
13	tridecane	.....C <sub>13</sub> H <sub>28</sub> .....	labintaltán
14	tetradecane	.....C <sub>14</sub> H <sub>30</sub> .....	labimpattán
15	pentadecane	.....C <sub>15</sub> H <sub>32</sub> .....	labinlimtán
16	icosane	.....C <sub>20</sub> H <sub>42</sub> .....	dalpultán
17	henicosane	.....C <sub>21</sub> H <sub>44</sub> .....	dalpul-istán
18	docosane	.....C <sub>22</sub> H <sub>46</sub> .....	dalpuldaltán
19	tricosane	.....C <sub>23</sub> H <sub>48</sub> .....	dalpultaltán
20	tetracosane	.....C <sub>24</sub> H <sub>50</sub> .....	dalpulpattán
21	triacontane	.....C <sub>30</sub> H <sub>62</sub> .....	talpultán
22	hentriacontane	.....C <sub>31</sub> H <sub>64</sub> .....	talpul-istán
23	dotriacontane	.....C <sub>32</sub> H <sub>66</sub> .....	tatpuldaltán
24	tetracontane	.....C <sub>40</sub> H <sub>82</sub> .....	patpultán
25	pentacontane	.....C <sub>50</sub> H <sub>102</sub> .....	limpultán

## ANG MGÁ HANGÒ SA ALKÁN

(The Alkane Derivatives)

1	alcohol	.....	alkuhól
2	methanol	.....CH <sub>3</sub> OH.....	metanól
3	ethanol	.....C <sub>2</sub> H <sub>5</sub> OH.....	etanól
4	propanol	.....C <sub>3</sub> H <sub>7</sub> OH.....	propanól
5	butanol	.....C <sub>4</sub> H <sub>9</sub> OH.....	byutanól
6	ether	.....	eter

7	aldehyde	aldihád
8	alkanal	alkanál
9	alkanone	alkanón
10	ketone	kitón
11	ester	ester
12	amine	amín
13	amide	amád

### ANG MGÁ ALKÉN

(The Alkenes)

1	ethene	$C_2H_4$	etén
2	propene	$C_3H_6$	propén
3	butene	$C_4H_8$	byutén
4	pentene	$C_5H_{10}$	limtén
5	hexene	$C_6H_{12}$	nimtén

### ANG MGÁ ALKAIN

(The Alkynes)

1	ethyne (acetylene)	$C_2H_2$	etain (asetilín)
2	propyne	$C_3H_4$	propain
3	butyne	$C_4H_6$	byutain
4	pentyne	$C_5H_8$	limtain
5	hexyne	$C_6H_{10}$	nimtain

### ANG MGÁ SALKUALKÁN

(The Cycloalkanes)

1	cyclopropane	$C_3H_6$	salkupropán
2	cyclobutane	$C_4H_8$	salkubyután
3	cyclopentane	$C_5H_{10}$	salkulimtán
4	cyclohexane	$C_6H_{12}$	salkunimtán
5	cycloheptane	$C_7H_{14}$	salkupittán

### ANG MGÁ SANGHÁYAING HAYDROKARBÓN

(The Aromatic Hydrocarbons)

1	benzene	$C_6H_6$	bensén
2	toluene (methyl benzene)	$C_7H_8$	tolwén (metíl bensén)
3	naphthalene	$C_{10}H_8$	naptalén
4	anthracene	$C_{14}H_{10}$	antrasén
5	phenanthrene	$C_{14}H_{10}$	penantrén

**ANG MGÁ DAMSALKUPING HAYDROKARBÓN***(The Heterocyclic Hydrocarbons)*

1	pyridine .....	$C_5H_5N$ .....	piridín
2	aniline .....	$C_6H_5NH_2$ .....	anilín
3	quinoline .....	$C_9H_7N$ .....	kinolín
4	acridine .....	$C_{13}H_9N$ .....	akridín

# 5

## HAYNAYAN

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Lahatáng Haynayaning Katawagán . . . . .	159
Palásíhayan . . . . .	166
Dalúbhalmanan . . . . .	168
Dalúbháyupan . . . . .	173
Háykapnayan . . . . .	189
Háysugnayan . . . . .	190
Haynayaning Gamit sa Pánaliksikán . . . . .	192

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## LAHATÁNG HAYNAYANING KATAWAGÁN

*(General Terminology in Biology)*

1	biology, the biological sciences .....	haynayan (buhay + hánayan)
2	biological (adj., 1) .....	haynayin
3	biological (adj., 2) .....	haynayanin
4	biologist .....	haynayanon
5	biological worker .....	manghahaynáy
6	botany .....	dalúbhalmanan
7	zoology .....	dalúbháyupan
8	biochemistry .....	háykapnayan
9	biophysics .....	háysugnayan
10	microbiology .....	mikhaynayan
11	microanalysis .....	miksúrian
12	microscope .....	miksipat ( <i>mikmik</i> + <i>sipat</i> )
13	microscopic .....	miksipatin
14	microtome .....	mikgayat
15	microphotography .....	miklárawanán
16	microphotograph .....	miklarawan
17	kingdom .....	anyuhay ( <i>anyô</i> ng buhay)
18	phylum .....	sangahay ( <i>sangá</i> ng buhay)
19	subphylum .....	kubsangháy, kubsangahay
20	class .....	lipihay ( <i>lipì</i> ng buhay)
21	subclass .....	kublipháy, kublipihay
22	order .....	sunudháy ( <i>sunód</i> ng buhay)
23	suborder .....	kubsundáy, kubsunudháy
24	family .....	angkanháy ( <i>angkán</i> ng buhay)
25	subfamily .....	kub-angkanháy
26	genus .....	uriháy ( <i>urì</i> ng buhay)
27	species .....	sariháy ( <i>sarì</i> ng buhay)
28	evolve .....	sunlád ( <i>sulong</i> + <i>unlád</i> )
29	evolution .....	kasunlarán
30	theory of evolution .....	hunà ng kasunlarán
31	generation (of a living form) .....	salinháy
32	generation (racial) .....	sálinlahì
33	generation (of individuals) .....	sálintao
34	alternation of generation .....	hálinhinán ng salinháy
35	spontaneous generation .....	kusang pagkálíkhâ
36	regeneration .....	balikhaan
37	regenerate (v.) .....	balikhaín

38	regenerative (adj.)	balikhain
39	reproduction	balisuplínan
40	reproduce	magbalisuplín, balisuplingín
41	reproductive, genital	balisuplínin
42	sex (as a distinction)	sari
43	sex (as a situation)	kasarián
44	sexual	sáriin
45	asexual	awánsáriin
46	unisexual	sansáriin
47	bisexual reproduction	duhansáriing balisuplínan
48	new form of life	banyuháy ( <i>bagong anyô ng buhay</i> )
49	metamorphosis, metamorphism (process)	pagbanyuháy
50	metamorphose (v.)	magbanyuháy, bumanyuháy
51	mutant	ibanyuháy
52	mutation (process)	pag-ibanyuháy
53	mutate (v.)	mag-ibanyuháy
54	diversity	kayamuán
55	variation (1)	kaaligán
56	variation (2)	saalig
57	combination	pálakipan
58	recombination	balilákipan
59	differentiation (bio.)	pag-iibá, saibá
60	adaptation (n.)	saangay (Bis.)
61	adaptation (process of)	ángayan
62	to adapt (one's self)	umangay
63	to adapt (a thing to another)	iangay, saangayin
64	adaptable, adaptive	ángayin
65	selection	pilian
66	natural selection	piliang likás
67	survival	ligháy ( <i>ligtás + buhay</i> )
68	survival of the fittest	ligháy ng pinakaangkóp
69	survive (v.)	maligháy, sumaligháy, lumigháy
70	survivor	naligháy, manliligháy
71	exist (v.)	may, mayroón
72	existence	kamayhán, kamayrunán
73	struggle for existence	pakikibaka para sa kamayhán
74	being	kamagingán ( <i>magíng</i> )
75	becoming	samagingan, samaging
76	dependence	salig
77	interdependence	sáligan
78	symbiosis	sálighayan ( <i>salig + buhay + -an</i> )
79	symbiotic	sálighayin
80	balance of life	katimbangán ng buhay

81	cycle .....	ikot
82	cycle of life, life cycle .....	ikot-buhay
83	carbon cycle .....	ikot-karbón
84	term (used for concepts) .....	tawag
85	terminology .....	katawagán
86	name (used for concepts) .....	ngalan
87	nomenclature .....	kangalanán
88	binomial nomenclature .....	duhakaying kangalanán
89	classify .....	pag-urí-uriin
90	classification .....	paláurián, saurì
91	basis of classification .....	batayán ng saurì
92	artificial classification .....	gawá-gawáng saurì
93	ecological classification .....	palámuhaying saurì
94	scientific classification .....	maaghaming saurì
95	phylogeny .....	lipmúlaan ( <i>lipì + múlaan</i> )
96	phylogenetic .....	lipmúlain
97	phylogenetic tree .....	lipmúlaing punungkahoy
98	phylogenetic classification .....	lipmúlaing paláurián
99	systematic .....	maáyusin
100	systematics, science of classification .....	paláurianan
101	Linnean System .....	Linehing Kaayusán
102	higher forms of animals (plants) .....	matataás na anyô ng mgá hayop (halaman)
103	higher forms of life .....	matataás na anyô ng buhay
104	lower forms of animals (plants) .....	mabababang anyô ng mgá hayop (halaman)
105	lower forms of life .....	mabababang anyô ng buhay
106	animate .....	buháy
107	inanimate .....	dìbuháy
108	organic (1) .....	hayin ( <i>búhayin</i> )
109	organic (2) .....	taghayin ( <i>tatag + búhayin</i> )
110	inorganic (1) .....	dìhayin
111	inorganic (2) .....	dìtaghayin
112	living thing .....	katubagháy ( <i>katutubong bagay na may-buhay</i> )
113	histology .....	palásihayanán
114	organ (organized group of tissues) .....	tatag
115	organology .....	palátatagnán
116	physiology .....	liksanan ( <i>likásanan</i> )
117	anatomy .....	katwanan ( <i>katawánan</i> )
118	morphology (bio.) .....	paláanyuan
119	morphogenesis .....	múlanyuan ( <i>múlaan + anyô + -an</i> )
120	organism .....	tátagháy ( <i>tatag + buhay</i> )
121	microorganism .....	miktátagháy

122	microbe .....	mikháy ( <i>mik-</i> + <i>buhay</i> )
123	germ .....	binháy ( <i>binhì</i> + <i>buhay</i> )
124	bacterium, bacteria .....	isháy ( <i>ísahang silíd ng buhay</i> )
125	virus .....	haykáp ( <i>bagay na malábuhay at malá-sangkáp</i> )
126	habitat .....	tírahanan
127	habitation .....	tírahan
128	aquatic organism .....	tubigníng tátagháy
129	terrestrial organism .....	dalatníng tátagháy
130	arboreal organism .....	kakahuyníng tátagháy
131	aerial organism .....	hanginíng tátagháy
132	feeding habits .....	mgá ugali sa panginginain
133	carnivore .....	lamánkain
134	carnivorous .....	lamankáinin
135	herbivore .....	halmánkain
136	herbivorous .....	halmankáinin
137	omnivore .....	tanánkain
138	omnivorous .....	tanankáinin
139	germination, ontogenesis .....	pamiminháy
140	growth .....	tubò, pagtubò, satubò
141	growth ring, growth layer .....	tandáng-tubò
142	growth substance .....	sangkáp-tubò
143	determine .....	takdaán
144	determinate .....	takdain
145	indeterminate .....	dítakdain
146	determinate growth .....	takdaing tubò
147	indeterminate growth .....	dítakdaing tubò
148	origin .....	kasimulán
149	biological origin .....	haynaying kasimulán
150	embryological origin .....	biligníng kasimulán
151	grandfather .....	apò, lolo
152	great grandfather .....	nunò
153	ancestor .....	ninunò
154	ancestry .....	kanunuan
155	grandson .....	apó
156	descendants .....	inapó, inanák
157	progeny .....	kaapuhán
158	descent .....	panuplíng
159	line of descent .....	guhit ng panuplíng
160	genealogy .....	palámúlaan
161	genealogical .....	palámúlain
162	genealogical tree .....	palámúlaang punungkahoy
163	genealogical chart .....	talámúlaan

<b>164</b>	genetics .....	palámanahán
<b>165</b>	eugenics .....	bútinsuplingan
<b>166</b>	euthenics .....	bútimbuhayan
<b>167</b>	heredity .....	kamanahan
<b>168</b>	hereditary .....	mánahin, namamana
<b>169</b>	genes .....	kamana
<b>170</b>	genetic activity .....	kamanahing kabilusan
<b>171</b>	genetic defect .....	kamanahing sirà
<b>172</b>	acquired character .....	nátamóng sangkatángian
<b>173</b>	dominant character .....	nanánaíg na sangkatángian
<b>174</b>	recessive character .....	dáiging sangkatángian
<b>175</b>	alleles .....	ibayo
<b>176</b>	allelomorph .....	kaibayong-anyô, kaibayunyô
<b>177</b>	allelomorphic (adj.) .....	kaibayunyuin
<b>178</b>	allelomorphism .....	kaibayunyuan
<b>179</b>	stage .....	baitáng
<b>180</b>	stage of development .....	baitáng ng kaunlarán
<b>181</b>	kin .....	hinlóg
<b>182</b>	kinship .....	kahinlugán
<b>183</b>	relationship .....	pagkákaugnáy, kaugnayan
<b>184</b>	affinity .....	pagkámahígumin
<b>185</b>	natural affinity .....	likás na pagkámahígumin
<b>186</b>	resemble .....	makamukhâ, mákawangis
<b>187</b>	resemblance .....	pagkákamukhâ, pagkákawangis
<b>188</b>	structural resemblance .....	yáriing pagkákawangis
<b>189</b>	structural difference .....	yáriing kaibhán
<b>190</b>	similar .....	hawíg, kahawíg, magkahawíg
<b>191</b>	similarity .....	pagkákahawíg
<b>192</b>	homologue (n.) .....	tulad, katulad
<b>193</b>	homologous .....	magkátulad
<b>194</b>	homologous organs .....	mgá magkátulad na tatag
<b>195</b>	homologous structure .....	magkatulad na kayarián
<b>196</b>	analogue .....	wangkî, kawangkî
<b>197</b>	analogous .....	magkawangkî
<b>198</b>	analogous organs .....	mgá magkawangkíng tatag
<b>199</b>	analogous structure .....	magkawangkíng kayarián
<b>200</b>	homology .....	pagkákatulad
<b>201</b>	analogy .....	pagkákawangkî
<b>202</b>	heterology .....	pagkákaiabá
<b>203</b>	food .....	pagkain
<b>204</b>	nutrition (food) .....	paniyá
<b>205</b>	nutrition (sc.) .....	pániyahan

<b>206</b>	nutritious, nutritive .....	mapaniyá
<b>207</b>	metabolism .....	kapbisà
<b>208</b>	anabolism .....	kapyari
<b>209</b>	catabolism .....	kapsirà
<b>210</b>	digestion .....	satunaw
<b>211</b>	digest (v.) .....	satunawin
<b>212</b>	indigestion (tech.) .....	disatunaw
<b>213</b>	absorption .....	pagsigom
<b>214</b>	assimilation .....	pághiangay
<b>215</b>	excretion (system) .....	pálúwasan
<b>216</b>	inspiration (bio.) .....	sulúdhingahan
<b>217</b>	expiration (bio.) .....	luwáshingahan
<b>218</b>	breathing .....	paghingá
<b>219</b>	respiration .....	paláhingahan
<b>220</b>	capillary attraction .....	higom-lamuymóy
<b>221</b>	capillary repulsion .....	sikwáy-lamuymóy
<b>222</b>	imbibition .....	pamiminúm ( <i>minúm</i> , Kpn.)
<b>223</b>	osmosis .....	pananagós
<b>224</b>	diffusion (of molecules) .....	panunuót
<b>225</b>	pathology .....	palásakitan
<b>226</b>	pathological, pathologic .....	palásakitin
<b>227</b>	pathologist .....	dalúbsakit
<b>228</b>	pathogenesis .....	mulsákitan
<b>229</b>	pathogenic .....	mulsákitin
<b>230</b>	skeleton .....	kalansáy
<b>231</b>	fossil .....	haytó ( <i>buhay na nagíng bató</i> )
<b>232</b>	decay (first, odoriferous stage) .....	pagkábulók
<b>233</b>	decay (final, non-odoriferous stage) .....	pagkádunot
<b>234</b>	decomposition (natural process) .....	pagkáagnás
<b>235</b>	decadent .....	namúmulók
<b>236</b>	fermentation .....	pamamanis, pagkápanis
<b>237</b>	ferment (n.) .....	pamanis
<b>238</b>	ferment (v.) .....	panisin
<b>239</b>	fermented .....	panís
<b>240</b>	culture (socio.) .....	kalinangán
<b>241</b>	culture (bio.) .....	lináng
<b>242</b>	pure culture .....	tagnás na kalinangán
<b>243</b>	mixed culture .....	haluáng kalinangán
<b>244</b>	cultural medium (socio.) .....	pángkalinangang tálaytayan
<b>245</b>	cultural medium (bio.) .....	linangang sangkáp
<b>246</b>	conservation .....	satinggál
<b>247</b>	conservatism .....	panininggál
<b>248</b>	conserve .....	tinggalín

<b>249</b>	utilization .....	sagamit
<b>250</b>	preservation .....	saimbák
<b>251</b>	preserve (v.) .....	imbakín
<b>252</b>	mass (bio.) .....	kimpál
<b>253</b>	biomass .....	haykimpál
<b>254</b>	biotic .....	háyanin
<b>255</b>	community .....	pámayanán
<b>256</b>	biotic community .....	háyaning pámayanán
<b>257</b>	biotic environment .....	háyaning kapáligirán
<b>258</b>	population .....	santauhan
<b>259</b>	duct .....	anurán
<b>260</b>	dorsal .....	panlikód, likurán
<b>261</b>	ventral .....	katiyanán
<b>262</b>	axis .....	taluhog
<b>263</b>	symmetry .....	parianyô
<b>264</b>	symmetrical .....	parianyuin
<b>265</b>	bilateral symmetry .....	duhapaniging parianyô
<b>266</b>	radial symmetry .....	timbuluging parianyô
<b>267</b>	spherical symmetry .....	timbúluging parianyô
<b>268</b>	universal symmetry .....	sansinukbing parianyô
<b>269</b>	asymmetry .....	díparianyô, págkatabingî
<b>270</b>	asymmetrical .....	díparianyuin, tabingî
<b>271</b>	experiment .....	tiláw (Bis.)
<b>272</b>	research .....	saliksík, pánanaliksík
<b>273</b>	laboratory .....	pánaliksikán
<b>274</b>	audio-visual .....	diníg-tanawin
<b>275</b>	audio-visual instruction .....	diníg-tanawing pagtuturò
<b>276</b>	stimulus .....	ganyák
<b>277</b>	challenge .....	hamon
<b>278</b>	response .....	tugón
<b>279</b>	reaction (bio.) .....	balibisà
<b>280</b>	irritability .....	págkatálusalíng
<b>281</b>	irritable .....	tálusalíng
<b>282</b>	reflex .....	balikusà
<b>283</b>	conditioned reflex .....	sinanay na balikusà
<b>284</b>	taxis .....	bilíng
<b>285</b>	phototaxis .....	sugbilíng
<b>286</b>	geotaxis .....	dutbilíng

## PALÁSÍHAYAN

(Cytology)

1	cell .....	sihay (silíd na maybuhay)
2	cell study, cytology .....	palásíhayan
3	tissue .....	síhayan
4	histology .....	palásíhayanán
5	organ .....	tatag
6	organology .....	palátatagnán
7	fiber .....	sulid
8	functions of a cell .....	mgá taán ng isáng sihay
9	nucleus (of a cell) .....	butód
10	nucleolus .....	ibutód
11	granule .....	binutil
12	vacuole .....	lungkág
13	plasma .....	kapháy (sangkáp ng buhay)
14	plastid .....	kakapháy
15	protoplasm .....	mulkapháy
16	cytoplasm .....	silídkapháy
17	karyoplasm .....	butúdkapháy
18	endoplasm .....	loóbkapháy
19	ectoplasm .....	labáskapháy
20	metaplasm .....	lakdawkapháy
21	cytosome .....	silídlawas
22	cytokinesis .....	silídkilos
23	cytochrome .....	silídkuláy
24	cytoplast .....	silídkatwán
25	cytogenetics .....	silídmánahan
26	cell wall .....	dindíng ng sihay
27	membrane (cytological) .....	lamad
28	cell membrane .....	lamad ng sihay
29	plasma membrane .....	lamad ng kapháy
30	nuclear membrane .....	lamad ng butód
31	chromosome .....	kuláylawas
32	chromomere .....	kuláyputol
33	chromatid .....	kakulawas
34	chromatin .....	kulayín
35	chromatin network .....	kalambatáng kulayín
36	linin .....	sulirín
37	linin network .....	kalambatáng sulirín

38	chromatin-linin network .....	kalambatáng kulayín-sulirín
39	spireme .....	kidsulid ( <i>kidkíd</i> + <i>sulid</i> )
40	mitochondrion, chondriosome .....	sulidlawas
41	centrosphere .....	gitbulog
42	centrosome .....	gitlawas
43	centriole .....	gitbutil
44	karyosome .....	butúdlawas
45	lysosome .....	biluslawas
46	microsome .....	miklawas
47	ribosome .....	ribolawas
48	dictyosome, Golgi bodies .....	baláglawas, Golgi lawas
49	chiasma .....	sulingkáp ( <i>sulíng</i> , Bis. + <i>sangkáp</i> )
50	crista .....	palúng-palungan
51	metaplastic bodies .....	lakdawkaphaying lawas
52	pigment .....	dinsól
53	meiosis .....	hátinsihay
54	mitosis .....	hátimbutód
55	karyokinesis .....	butúdkilos
56	phase .....	yugtô
57	prophase .....	mulyugtô
58	metaphase .....	lakdawyugtô
59	anaphase .....	patidyugtô
60	telophase .....	kintayugtô

# DALÚBHALMANAN

(Botany)

## MGÁ KATAWAGÁN

(Terminologies)

1	plant .....	halaman
2	botany .....	dalúbhalmanan
3	botanist .....	dalúbhalmán
4	garden (ord.) .....	hálamanán
5	garden (bot.) .....	halmanán
6	flora .....	kahalmanán, taláhalmanan
7	vegetation .....	kagulayán
8	meadow .....	parang
9	grassland .....	damuhán
10	forest .....	gubat
11	forestry .....	palágúbatan
12	forestation .....	sagubat
13	reforestation .....	baligubat, mulinsagubat
14	jungle .....	kagubatan
15	woods .....	kahuyán
16	woodland .....	kakahuyán
17	terrarium .....	lúpaan
18	bush .....	karawagan
19	vine .....	baging
20	liana .....	dakbaging
21	tree .....	punungkahoy
22	arbor (bot.) .....	puhoy
23	shrub .....	palumpóng
24	herb .....	halmandamó
25	straw .....	dayami
26	hay .....	ginikan
27	plant kingdom, Plantae .....	anyuhay-halaman
28	thallophyte, Thallophyta .....	suwihán
29	bryophyte, Bryophyta .....	lumután
30	tracheophyte, Tracheophyta .....	dahunán
31	spermatophyte, Spermatophyta .....	butuhán
32	frond .....	dakdahon
33	lichen .....	ligbús (Bkl.)
34	fungus .....	buót (llk.), apugaw (Bkl.)
35	yeast (CO <sub>2</sub> forming) .....	paalsá

36	hydrophyte .....	halamang dánumin
37	mesophyte .....	halamang básain
38	xerophyte .....	halamang túyuin
39	halophyte .....	halamang tabsingin
40	epiphyte .....	halamang kapitín
41	aerophyte .....	halamang ánginin
42	plant cell .....	sihay-halaman
43	cell sap .....	dagtâ ng sihay
44	chromoplast .....	kuláykatwán
45	chromoplastid .....	kuláykakaháy
46	chromatophore .....	kuláybutil
47	chlorophyll .....	luntidinsól
48	chloroplast .....	luntikatwán
49	chloroplastid .....	luntikakaháy
50	xanthophyll .....	diláwdinsól
51	photosynthesis .....	sugláguman ( <i>suga + laguman</i> )
52	seedling (not yet sown) .....	binhî
53	seedling (sown) .....	punlâ
54	sprout (n.) .....	talbós, sibol
55	sprout (v.) .....	sumibol, magpasibol
56	apical growth .....	dúluhing tubò
57	intercalary growth .....	bíyasing tubò
58	internal growth .....	panloób na tubò
59	opposite branching .....	tápatang pagsasangá
60	alternate branching .....	sálisiháng pagsasangá
61	whorled branching .....	kumpulang pagsasangá
62	adventitious branching .....	saanmáng pagsasangá
63	bunch (of bananas, etc.) .....	buwíg (ng saging, atb.)
64	cluster (of bananas, etc.) .....	píling (ng saging, atb.)
65	leaf arrangement, phyllotaxy .....	áyusang-dahon
66	leaf mosaic .....	katugdayáng-dahon
67	whorled leaf arrangement .....	kumpulang áyusang-dahon
68	alternate leaf arrangement .....	sálisiháng áyusang-dahon
69	plant diversity .....	kayamuáng-halaman
70	annual plant .....	táuning halaman
71	biennial plant .....	duhantáuning halaman
72	perennial plant .....	lagutáuning halaman
73	thorny plant .....	dawag
74	capillarity .....	kalamuymuyán
75	capillary action .....	bilos-lamuymóy
76	capillary tube .....	tubong lamuymóy
77	hydrotropism .....	danumbaling

78	phototropism .....	sugbaling
79	geotropism .....	dagbaling
80	chemotropism .....	kapbaling
81	Botany Laboratory .....	Pánaliiksikán ng Dalúbhalmanan
82	Philippine National Herbarium .....	Pambansáng Halmandámuhan ng Pilipinas
83	grass .....	damó
84	weed .....	hilamon
85	hedge .....	halamang-bakod, pimpin
86	mold .....	amag, tagulamín
87	moss .....	lumot
88	alga .....	alga
89	deforestation .....	higubat*

## MGÁ BAHAGÌ NG HALAMAN

(Parts of the Plant)

1	kernel, seed .....	butó
2	shoot .....	sulóy
3	sucker .....	suwí
4	root .....	ugát
5	root system .....	kaugatán
6	tap root .....	láliming ugát
7	root hair .....	balahibong ugát
8	root cap .....	saklób-ugát
9	rootlet .....	ugát-ugatan
10	primary root .....	pángunahing ugát
11	secondary root .....	pángalwahing ugát
12	tertiary root .....	pángatluhing ugát
13	cotyledon .....	bindahon ( <i>binhíng dahon</i> )
14	monocotyledon .....	sámbindahon
15	dicotyledon .....	duhámbindahon
16	monocotyledonous .....	sámbindáhunin
17	dicotyledonous .....	duhámbindáhunin
18	monocot .....	sambín
19	dicot .....	duhambín
20	stem, stalk .....	púnungtangkáy
21	tendrìl .....	kawáy
22	trunk .....	punò
23	log .....	punghál (Bkl.)
24	branch .....	sangá
25	twig .....	sangáy, gangaw (ETD)

\*Isinama ng may-sipì bilang karagdagang katawagán

26	three regions of a dicot stem .....	tatlóng danay ng duhambíng púnungtangkáy
27	bark .....	balátkahoy
28	sap .....	dagtâ, katás
29	resin .....	kalamak, sahing
30	sapwood .....	banakal (Bkl.), dagtaing kahoy
31	heartwood .....	tigás
32	wood .....	kahoy
33	pith .....	ubod, halyás (NSL)
34	cambium layer .....	bayluhing susón
35	stump .....	tuód
36	node .....	bukó
37	internode (of bamboo, etc.) .....	biyás (ng kawayan, atb.)
38	bud .....	buko
39	bud formation .....	pamumuko
40	budding .....	pagpapabuko
41	leaf bud .....	dahong buko
42	flower bud .....	bulaklakang buko
43	bud scale .....	bukong kaliskís
44	axil .....	biklát
45	axillary bud .....	biklatang buko
46	adventitious bud .....	saanmáng buko
47	mixed bud .....	haluáng buko
48	dormant bud .....	tulóg na buko
49	fruit .....	bunga
50	scar (on trees) .....	bikat
51	bud scar .....	bikat-buko
52	leaf scar .....	bikat-dahon
53	lenticel .....	kilít-punò
54	skin, peel, rind (of fruit) .....	upak, balát
55	rice husk .....	ipá
56	ear (of corn, etc.) .....	pusò (ng maís, atb.)
57	ear or stem of grain .....	uhay
58	cob .....	busil, busál
59	spine (plants, animals) .....	tiník
60	leaf .....	dahon
61	foliage .....	kadahunan
62	parts of a typical leaf .....	mgá bahagì ng kinatawáng dahon
63	blade (of a leaf) .....	panid (ng isáng dahon)
64	base (of a leaf) .....	takad (ng isáng dahon)
65	petiole .....	dahuntangkáy, tangkáy
66	midrib .....	tintíng
67	vein (of a leaf) .....	maláugát (ng isáng dahon)
68	veinlet .....	maláugát-ugatan

- 69 stipule ..... dahúndahunan  
70 stomata ..... kilít-dahon

# DALÚBHÁYUPAN

(Zoology)

## MGÁ KATAWAGÁN

(Terminologies)

1	animal .....	hayop
2	zoology .....	dalúbháyupan
3	zoologist .....	dalúbhayop
4	zoo .....	hayupán
5	fauna .....	kahaypán
6	animal kingdom (Kingdom Animalia) .....	anyuhay-hayop
7	animalcule .....	lithayop
8	mite .....	kagaw
9	protozoan (Phylum Protozoa) .....	mulháy (sangahay-mulháy)
10	poriferan (Phylum Porifera) .....	búgaan (sangahay-búgaan)
11	coelenterate (Phylum Coelenterata) .....	hungkagan (sangahay-hungkagan)
12	flatworm (Phylum Platyhelminthes) .....	lapyulod ( <i>lapyáng ulod</i> , Bis.) (sangahay-lapyulod)
13	roundworm (Phylum Nematoda) .....	bilulod ( <i>bilóg</i> na <i>ulod</i> ) (sangahay-bilulod)
14	echinoderm (Phylum Echinodermata) .....	tinikán (sangahay-tinikán)
15	annelid (Phylum Annelida) .....	ugnýkatwán (sangahay-ugnýkatwán)
16	mollusk (Phylum Mollusca) .....	kumabibi (sangahay-kumabibi)
17	arthropod (Phylum Arthropoda) .....	ugnýpaá (sangahay-ugnýpaá)
18	chordate (Phylum Chordata) .....	táyudturán (sangahay-táyudturán)
19	notochord .....	táyudtód
20	reptile (Class Reptilia) .....	bayabág (lipihay-bayabág)
21	reptilian .....	báyabagín
22	winged animal (Class Aves) .....	hayop na pakpakán (lipihay-pakpakán)
23	four-legged animal (Class Tetrapoda) .....	hayop na aapatíng-paá (lipihay-aapatímpaá)
24	locomotion .....	lunankilos
25	egg .....	itlóg
26	embryo .....	bilíg
27	zygote .....	punlog
28	circulation .....	salibot
29	sense .....	dandám ( <i>damdam</i> )
30	sensation .....	karandamán
31	nerve .....	dagandám
32	nervous system .....	kaayusáng-dagandám, dagandaming kaayu-sán
33	nerve fiber .....	sulid ng dagandám

34	nerve ending .....	dulo ng dagandám, panandám
35	sensory nerve .....	dandaming dagandám
36	motor nerve .....	kílusing dagandám
37	impulse .....	pitlág
38	nerve impulse .....	pitlág ng dagandám
39	vessel .....	daluyán
40	blood vessel .....	daluyáng-dugô
41	blood platelet .....	muntlipáy ( <i>muntí</i> + <i>dalipay</i> ) ng dugô
42	capillary (zool.) .....	lamuymóy
43	capillary vessel .....	daluyáng lamuymóy
44	artery .....	luwasdaluyán
45	vein .....	balidaluyán
46	corpuscle .....	litbutil
47	red blood corpuscle (erythrocyte) .....	puláng litbutil-dugô
48	red blood cell (RBC) .....	puláng sihay-dugô
49	white blood corpuscle (leukocyte) .....	putíng litbutil-dugô
50	white blood cell (WBC) .....	putíng sihay-dugô
51	animal cell .....	sihay-hayop
52	skeleton .....	kalansáy
53	skeletal .....	kálansayín, pangalansáy
54	exoskeleton .....	kalansáy-panlabás
55	endoskeleton .....	kalansáy-panloób
56	axial skeleton .....	talihugíng kalansáy
57	appendicular skeleton .....	hugpunging kalansáy
58	skeletal remains .....	kálansayíng labí
59	osteology .....	palábutuhán
60	body cavity, coelom .....	hungkág ng katawán
61	canal .....	tagulíng (JVP)
62	alimentation .....	mánganan (Kpn.)
63	alimentary canal, digestive tract .....	mánganing tagulíng
64	auditory (adj.) .....	dínigin
65	scar (on animal skin) .....	pilat
66	animal diversity .....	kayamuáng-hayop
67	diet .....	talákainán
68	dietetics .....	palákainán
69	dietician .....	dalubpakain
70	interior .....	loób
71	exterior .....	labás
72	internal .....	panloób
73	external .....	panlabás
74	anterior .....	unahán
75	posterior .....	hulihán

76	dorsal .....	panlikód, likurán
77	frontal .....	pangharáp, harapan
78	ventral .....	katiyanán
79	abdominal .....	pantiyán
80	lateral .....	panaligiran ( <i>pantagiliran</i> )
81	caudal .....	pamuntót, buntutin
82	cranial .....	pamungô, búnguin
83	cephalic .....	pang-ulo, úluhin
84	cephalic index .....	úluhing panurò
85	entomology .....	dalúbkúlisapán
86	conchology .....	dalúbkábibihán
87	ichthyology .....	dalúb-isdaan
88	ornithology .....	dalúb-ibunan
89	Division of Zoology .....	Sangáy ng Dalúbháyupan
90	Entomology Division .....	Sangáy ng Dalúbkúlisapán
91	Conchology Division .....	Sangáy ng Dalúbkábibihán
92	Ichthyology Division .....	Sangáy ng Dalúb-isdaan
93	taxidermy .....	paláayusáng-balát
94	taxidermist .....	tagáyos-balát
95	locust (young, just learning to fly) .....	dayupay
96	circulatory system, cardiovascular system .....	kaayusáng-salibot*
97	digestive system .....	kaayusáng-satunaw*
98	endocrine system .....	kaayusáng-loóbkatasán*
99	integumentary system, exocrine system .....	kaayusáng-labáskatasán*
100	lymphatic system, immune system .....	kaayusáng-kúlanián*
101	muscular system .....	kaayusáng-kalamnán*
102	renal system, urinary system, excretory system .....	kaayusáng-saluwás*
103	reproductive system .....	kaayusáng-balisuplingin*
104	respiratory system .....	kaayusáng-sahingá*
105	skeletal system .....	kaayusáng-kálansayín*

## MGÁ BAHAGÌ NG KATAWÁN NG TAO AT HAYOP

(Parts of the Human and Animal Body)

### SAKLÁW NG ULO

(Pertaining to the Head)

1	head .....	ulo
2	skull .....	bungô
3	crown of the head .....	tuktók
4	fontanel .....	bumbunan
5	hair (of the head) .....	buhók

\*Isinama ng may-sipì bilang karagdagang katawagán

6	whorl (of hair of the head) .....	puyó
7	brain .....	utak
8	marrow, bone marrow .....	utik
9	forehead .....	noó
10	frontal lobe .....	utak-noó
11	frontal bone .....	butóng-noó
12	brow .....	dahî (Bis.)
13	eyebrow .....	kilay
14	eyelash .....	piíkmatá
15	eyelid .....	talukap ng matá
16	eye .....	matá
17	eyeball .....	bilumatá
18	retina .....	busilig (PSL)
19	white of the eye .....	puñi ng matá
20	pupil (of the eye) .....	balintatáw
21	iris (diaphragm) .....	alíkmatá
22	eyesight .....	buliga, paningín
23	face .....	mukhâ
24	temple .....	piipisan (JVP)
25	cheek .....	pisngí
26	malar (n.) .....	butó sa pisngí
27	dimple .....	puyó sa pisngí, biloy
28	nose .....	ilóng
29	nostril .....	butas ng ilóng
30	tip of the nose .....	tungkí ng ilóng
31	bridge of the nose .....	balingusan (JVP)
32	ear .....	tainga
33	vestibule .....	aliguwańg
34	chin .....	babà
35	beard .....	balbás, gumi (ETD)
36	mustache .....	bungot, bigote, misáy
37	bristle (especially in animals) .....	tutsáng
38	tongue .....	dilà
39	hypoglossal (n.) .....	kubdilà
40	palate .....	ngalángalá
41	hard palate .....	matigás na ngalángalá
42	soft palate .....	malambót na ngalángalá
43	masseter (n.) .....	pangnguyâ (PMA)
44	gland .....	katasán
45	salivary gland .....	katasáng-laway
46	lymph gland, lymph node .....	kulanî
47	mouth cavity .....	bungangà

48	throat .....	lalamunan
49	trachea, windpipe, bronchial tube .....	hihingahán
50	larynx .....	tatagukán
51	voice box .....	pátinigan
52	esophagus, gullet .....	lalaugan
53	pharynx .....	lalagukán
54	Adam's apple .....	gulúnggulúngan (PMA)
55	vocal chord .....	tínigang-bagtíng
56	glottis .....	pasadilà
57	epiglottis .....	harang-pasadilà
58	uvula .....	tilaó (JVP)
59	tonsil .....	gutíl
60	scalp .....	anít
61	skin .....	balát
62	pore (of the skin) .....	kilít (ng balát)
63	sweat gland .....	katasáng-pawis
64	hide (of animals) .....	panít (Bis.)
65	nape .....	batok
66	neck, cervix .....	líg
67	mouth .....	bibíg
68	lip .....	labì
69	snout .....	ngusò
70	gum .....	gilagid
71	fang (in animals) .....	pangil
72	tooth .....	ngipin
73	temporary tooth .....	pansamantaláng ngipin
74	permanent tooth .....	pálágiang ngipin
75	milk tooth .....	ngiping kanin
76	incisor .....	ngiping haráp
77	cuspid, canine .....	pamangál, pangalís
78	bicuspid, premolar .....	tálubagáng
79	molar .....	bagáng
80	wisdom tooth .....	bagáng-baít
81	jaw .....	pangá
82	jawbone .....	sihang
83	maxilla, upper jawbone .....	taásihang
84	mandible, lower jawbone .....	babásihang
85	brachycephalic .....	punggók-úluhin
86	dolichocephalic .....	habáng-úluhin

SAKLÁW NG KATAWÁN  
(*Pertaining to the Body*)

1	body (of organic things) .....	katawán
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2	body hair .....	baláhibo
3	shoulder .....	balikat
4	clavicle, collar bone .....	balagat
5	scapula, shoulder bone .....	paypáy
6	chest .....	dibdíb
7	pectoral (adj.) .....	pandibdíb
8	pectoral muscle .....	kalamnáng pandibdíb
9	thorax .....	dughán (Hlg.)
10	rib .....	tadyáng
11	floating rib .....	tadyáng na lutáng
12	breast, mammary gland .....	suso
13	nipple, teat .....	utóng
14	back .....	likód
15	side .....	tagiliran
16	waist .....	baiwáng
17	backbone, spinal column .....	gúlugurán
18	vertebra .....	gulugód
19	lung .....	bagà
20	heart .....	pusò
21	pericardium (n.) .....	tapát-pusò
22	membrane (anat.) .....	bambán
23	pericardium .....	bambánpusò (PMA)
24	periosteum .....	bambánbutó (PMA)
25	peritonium .....	bambántiyán (PMA)
26	pleura .....	bambánbagà (PMA)
27	stomach .....	sikmurà
28	epigastric region .....	kasikmuraan
29	small intestine .....	isaw (JVP), maliít na bituka
30	duodenum .....	punong-isaw
31	jejunum .....	gitnáng-isaw
32	ileum .....	dulong-isaw
33	large intestine, colon, gut, tripe .....	malakíng bituka, bituka
34	enteric (adj.) .....	bitukahín
35	ascending colon .....	pataás na bituka
36	transverse colon .....	haláng na bituka
37	descending colon .....	pababáng bituka
38	mesentery (n.) .....	dalambituka
39	vermiform appendix .....	malábulating hugpóng
40	viscere .....	lamánloób
41	rectum .....	tumbóng
42	anus .....	butas-puwít
43	antrum .....	guwáng (PMA)
44	hiatus .....	lúsutan

45	meatus .....	lágusan, hangyâ (PMA)
46	orifice .....	búkasan
47	foramen .....	butas-butó
48	liver .....	atáy
49	spleen .....	palfi
50	bile .....	apdó
51	gall bladder .....	apduhan
52	urinary bladder .....	pantóg
53	kidney .....	bató
54	perinephric (adj.) .....	lígiring-bató
55	adrenal .....	takípbató (PMA)
56	pancreas .....	lapáy
57	matrix, womb, uterus .....	bahay-batà
58	placenta .....	inunan
59	navel .....	pusod
60	umbilical cord .....	tálimpusod
61	abdomen, belly .....	tiyán
62	intra-abdominal .....	loobtiyanin
63	hypogastric region .....	pusón
64	pelvic region .....	puwitán
65	buttock .....	pigi
66	hip .....	balakáng
67	ilium .....	butó sa balakáng
68	lap .....	kandungán
69	groin .....	singit
70	inguinal (adj.) .....	pansingit

### SAKLÁW NG MGÁ GALAMÁY

*(Pertaining to the Limbs)*

1	limb .....	galamáy
2	forelimb .....	unaháng galamáy
3	hindlimb .....	huliháng galamáy
4	appendage .....	kahugpungán
5	articulation .....	kasúkasúan
6	joint .....	sugpóng
7	hand .....	kamáy
8	upper arm .....	bisig
9	forearm .....	takdáy (ETD)
10	armpit, axilla .....	kílikili
11	elbow .....	siko
12	arm bone .....	biyás ng kamáy
13	ulna .....	butúntakdáy
14	muscle .....	kalamnán

15	muscle of the arm, biceps .....	dagádagaan
16	tensor muscle .....	kalamnáng pamatak
17	flexor muscle .....	kalamnáng pamaluktót
18	flesh .....	lamán
19	wrist .....	galáng-galangán
20	back of the hand, carpus .....	kamaó (PMA)
21	palm of the hand .....	palad
22	finger .....	daliñ
23	thumb .....	hinlalakí
24	index finger, forefinger .....	hintuturô
25	middle finger .....	hinlalatô, hinggigitnâ
26	ring finger .....	páninsingan, palásinsingan
27	little finger .....	kálingkingan, hinlilit
28	knuckle (of the finger) .....	bukó ng daliñ
29	nail .....	kukó
30	fist .....	suntók
31	foot .....	paá
32	thigh .....	hità
33	shank (of humans) .....	bintí
34	shinbone .....	biyás ng bintí
35	calf (of the leg) .....	butí, kalamnán ng bintí
36	leg (of animals) .....	bitís
37	shin .....	lulód
38	bone, os .....	butó
39	long bone (of skeleton) .....	biyás (ng kalansáy)
40	tibia .....	butúnlulód
41	knee .....	tuhog
42	kneecap .....	bayugo
43	knee joint .....	sugpóng-tuhod
44	pepliteal, ham .....	alák-alakán, pitlungan (ETD)
45	toe .....	daliñ ng paá
46	big toe .....	hinlalakí sa paá
47	little toe .....	kálingkinan (hinlilit) sa paá
48	middle toe .....	hinggigitnâ (hinlalatô) sa paá
49	arch of the foot .....	balantók-paá
50	dorsum of the foot .....	ibabaw-paá
51	sole of the foot .....	talampakan
52	ankle .....	bukúngbukong
53	heel .....	sakong
54	calcaneous (n.) .....	butó sa sakong
55	cartilage .....	malábutó
56	ligament .....	gatil

57	tendon .....	litid
58	heel tendon .....	litid ng sakong
59	sinew .....	gatid (JVP)

## KALÚSUGAN AT MGÁ SAKÍT

*(Healthfulness and Sickness)*

1	healthfulness .....	kalúsugan
2	health .....	lusóg
3	healthy .....	malusóg
4	unhealthy .....	dímalusóg
5	mental health .....	isipníng lusóg
6	disease .....	balatian (Bis.)
7	mental disease .....	isipníng balatian, balatian ng isip
8	hygiene .....	palálusugan
9	hygienic .....	palálusugin
10	sanitation .....	palágálingan
11	sanitary .....	palágálingin
12	sanitarium .....	págalingán
13	nursery .....	páalagaán
14	center (org.) .....	lunduyan
15	health center .....	lunduyang-lusóg
16	research center .....	lunduyang-saliksík
17	medical care .....	palágámutan
18	hospital service .....	lingkód-uspítal
19	medical service .....	lingkód-panggagamót
20	pathology .....	palásákitan
21	pathological, pathologic .....	palásákitin
22	pathologist .....	dalúbsakít
23	pathogenesis .....	mulsákitan
24	pathogenic .....	mulsákitin
25	disease germ .....	binháy ng balatian
26	antibiotic .....	labanháyanin
27	anesthesia .....	pangimay (JVP), hirandam
28	infection .....	hawa
29	infectious .....	nakahahawa
30	contagion .....	lalin
31	contagious .....	nakalalalin
32	diagnosis .....	suring-aral
33	diagnose (v.) .....	suring-aralín
34	diagnostic .....	suring-áralin
35	diagnostic chart .....	suring-áraling taltaguhit
36	symptom .....	pángitain
37	diagnostic symptom .....	suring-áraling pángitain

38	diagnostician	mánunuring-aral
39	stethoscope	dibliníg ( <i>dibdīb + uliníg</i> )
40	cardiology	palápúsuan
41	radiology	paládiglapan
42	etiology	palásanhiang-sakít
43	sickness	sakít
44	sick	maysakít
45	sickly	masákitin, masasaktín
46	morbid	sákitin
47	well, not sick	magalíng
48	illness	karamdaman
49	ill	may karamdaman
50	malady (n.)	kamálmaán ( <i>malmâ</i> )
51	ailment	alí (PSL)
52	ail	umalí
53	recovery (from sickness)	galíng, paggalíng
54	convalescence	aliwaywáy (JVP), aliway (ETD)
55	convalescent	aliwaywayin, óliwayin
56	relapse	binat
57	malaise	alis-ís, alinsangan
58	indisposition	bigát ng katawán
59	indisposed	mabigát ang katawán
60	torpor (sluggishness, inactivity)	ngaló
61	general weakness of the body	ngalós
62	fatigue	ngalay
63	tiredness	pagod
64	weariness	hapò
65	pain	sakít
66	painful	masakít
67	throbbing pain	kirót
68	smarting pain	hapdī
69	suffering	sákit
70	shortness of breath, pant	hingal
71	dyspnea	paghihirap ng paghingá
72	angina, angina pectoris	paninikíp ng dibdīb
73	palpitation	tahíp, sikdó
74	paroxysm	bugsô
75	insomnia	dípagkákatulóg
76	rings around the eyes due to lack of sleep	ngalumatá
77	allergy	tálurandám
78	allergic	tálurandamin
79	allergic to cold	tálurandamin sa lamíg
80	allergic to rough cloth	tálurandamin sa magaspáng na damít

<b>81</b>	cold (disease) .....	sipón
<b>82</b>	asthma .....	hikà
<b>83</b>	asthmatic .....	híkain
<b>84</b>	tuberculosis, phtisis .....	pagkátuyô
<b>85</b>	cough .....	ubó
<b>86</b>	hiccough .....	sinók
<b>87</b>	fever .....	lagnát
<b>88</b>	slight fever, feverishness .....	sinat
<b>89</b>	latent .....	tagô, lubóg
<b>90</b>	latent fever .....	lagnát na lubóg
<b>91</b>	post-febrile (adj.) .....	pagkálagnát
<b>92</b>	delirium .....	pagkáhibáng
<b>93</b>	delirious .....	nahíhibáng
<b>94</b>	chill .....	ngiki, kaligkíg
<b>95</b>	spasmodic movement due to cold or fear ...	ngatál
<b>96</b>	numbness .....	manhíd
<b>97</b>	dizziness .....	hilo
<b>98</b>	acute dizziness .....	liyó
<b>99</b>	vertigo .....	lulà
<b>100</b>	seasickness .....	sawan
<b>101</b>	confusion .....	litó
<b>102</b>	syncope .....	himatáy (PMA)
<b>103</b>	induration .....	paninigás
<b>104</b>	papule .....	butlíg
<b>105</b>	pimple, acne .....	tagihawat
<b>106</b>	wart .....	kulugó
<b>107</b>	mole .....	taling, nunál
<b>108</b>	wheal .....	tagulabáy
<b>109</b>	blister .....	paltós, lintós, agihap (ETD)
<b>110</b>	heat rash, prickly heat .....	bungang-init, bungang-araw
<b>111</b>	blotch .....	pantál
<b>112</b>	welt .....	latay
<b>113</b>	echymosis .....	pasâ
<b>114</b>	itch .....	katí
<b>115</b>	pus .....	nanà
<b>116</b>	sarna .....	galís
<b>117</b>	boil, pustule .....	pigsá
<b>118</b>	carbunole .....	pigsáng-kabít
<b>119</b>	herpes, erysipelas .....	sakít-ahas
<b>120</b>	ringworm .....	buni
<b>121</b>	athlete's foot, chilblain .....	alipungá
<b>122</b>	callosity .....	lipák, kalyo

<b>123</b>	measles .....	tigdás
<b>124</b>	smallpox .....	bulutong
<b>125</b>	chicken pox .....	bulutungtubig
<b>126</b>	leprosy .....	ketong
<b>127</b>	leper .....	kétongin
<b>128</b>	tumor .....	bukol
<b>129</b>	abscess .....	bagâ
<b>130</b>	swelling .....	magâ
<b>131</b>	inflammation .....	pamamagâ
<b>132</b>	tumefaction .....	manás
<b>133</b>	dropsy .....	bundóy (ETD)
<b>134</b>	beriberi .....	beriberi
<b>135</b>	infantile beriberi .....	taól
<b>136</b>	cachexia .....	pamamayát
<b>137</b>	apoplexy .....	sumpóng-ulo
<b>138</b>	stiff neck, torticollis .....	paninigás-liíg
<b>139</b>	hemorrhage of the nose, epistaxis .....	balinguyngóy
<b>140</b>	glossitis .....	magandilà
<b>141</b>	ptyalism .....	paglalawáy
<b>142</b>	pyorrhea .....	magáng-gilagid
<b>143</b>	stomatitis .....	magambibíg
<b>144</b>	infectious swelling of the lymphatic gland .....	pamamagâ ng kulani
<b>145</b>	mumps, inflammation of the parotid glands ..	baykî
<b>146</b>	hyperthyroidism .....	bosyò
<b>147</b>	tendency to vomit .....	duwál
<b>148</b>	vomit (n.) .....	suka
<b>149</b>	vomit (v.) .....	sumuka
<b>150</b>	emesis .....	pagsusuká
<b>151</b>	nausea .....	dimarim
<b>152</b>	hemetamesis .....	pagsukandugô
<b>153</b>	hemoptysis .....	paglurandugô
<b>154</b>	surfeit .....	suyà, umay
<b>155</b>	anorexia .....	awággana
<b>156</b>	indigestion (ord.) .....	dípagkátunaw, apad (Noli, PM 360)
<b>157</b>	belch, gas eructation .....	digháy
<b>158</b>	flatus, flatulence .....	kabag, usóg
<b>159</b>	expelled flatulence .....	utót
<b>160</b>	constipation .....	dípagdumí, paninibí
<b>161</b>	diarrhea .....	tilasók, tulasók, pagtataé
<b>162</b>	bacillary dysentery .....	daragís
<b>163</b>	amoebic dysentery, amoebiasis .....	ití, pag-iití
<b>164</b>	cholera .....	kólera
<b>165</b>	enteritis .....	pamamagâ ng isaw

166	gastritis .....	pamamagâ ng sikmurà
167	gastralgia .....	sinisikmurà
168	colitis .....	pamamagâ ng bituka
169	colic .....	apad (ETD)
170	tapeworm .....	ulyabid
171	hydrophobia .....	tubigsikwáy
172	polydipsia .....	pagkápaláinúm
173	polyphagia .....	sibà, págkasibà
174	hyperacidity .....	sukdúlkaasdán, pangangasím ng sikmurà
175	hypoacidity .....	kubúskaasdán
176	tenesmus .....	hilab
177	ascites .....	panunubig-tiyán
178	paracentesis .....	butastiyán
179	pancreatitis .....	maganlapáy
180	nephritis .....	magambató
181	splenitis .....	magampalí
182	strangury .....	balisawsáw
183	dysuria .....	masakít na pag-ihì
184	pyuria .....	pagnananà sa ihì
185	hematuria .....	pag-ihindugô
186	hydronephrosis .....	panunubigbató
187	pyemia .....	pagnananà sa dugô
188	septicemia .....	pagkálason ng dugô
189	spurious pregnancy .....	kayawà
190	hernia .....	lulós
191	inguinal hernia .....	lulós-singit
192	gout .....	piyô (JVP)
193	arthralgia .....	pananakít ng kasúkasuan
194	arthritis .....	pamamagâ ng kasúkasuan
195	arthropathy .....	kapansanan ng kasúkasuan
196	cramp .....	pulikat
197	lameness .....	pilay
198	crippleness .....	lumpó
199	hypertension .....	sukdúldiín, mataás ang dugô
200	hypotension .....	kubúsdíin, mababà ang dugô
201	pest .....	angól (ETD)
202	dengue .....	dengge
203	intoxication .....	pagkálásing
204	anesthesia .....	pangimay
205	rheumatism .....	rayuma

## DALÚBSÁRIAN

(Sexology)

LAHATÁNG SÁRIING KATAWAGÁN

(General Sexual Terminology)

1	sex (as a distinction) .....	sari
2	sex (as a situation) .....	kasarian
3	sexology .....	dalúbsárian
4	sexual .....	sáriin
5	sexuality .....	pagkásáriin
6	male sex .....	lalaking sari
7	female sex .....	babaing sari
8	reproduction .....	balisuplingan
9	reproductive, genital .....	balisuplingin
10	sex information .....	sáriing pabatíd
11	sex education .....	sáriing páтуруán
12	enlightened sex education .....	mapaliwanag na sáriing páтуруán
13	physiology of sex .....	liklanan ng kasarian
14	sex development .....	pag-unlád ng sari
15	sex growth .....	pagtubò ng sari
16	sex consciousness .....	malay-sari
17	sexual excitement .....	sáriing gigil
18	sexual desire .....	sáriing nasà
19	sexually hot .....	pasáriing mainit
20	sexually cold (frigid) .....	pasáriing malamíg
21	sexual conduct .....	sáriing gawî
22	sexual behavior .....	sáriing asal
23	contraceptive .....	labanlihi
24	birth control .....	supil-supling
25	malice .....	karumháng-isip
26	malicious .....	marumíng-isip
27	scandal .....	alingasngás, iskándaló
28	scandalous .....	maalingasgás
29	moral (adj.) .....	masanlíng, magandáng-asal
30	morals (sc.) .....	palásanlingan
31	morality .....	kasanlingán, kagandahang-asal
32	immorality .....	díkasanlingán, díkagandahang-asal
33	prostitute .....	balihandâ, kalapati (puta, patutot)
34	girl becoming a woman .....	nagdadalagá
35	boy becoming a man .....	nagbibinatâ

PANLALAKING BALISUPLINGING KAAYUSÁN

(Male Reproductive System)

1	male genital organ .....	panlalaking balisuplinging tatag
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2	genitalia, genitals	pamalisuplín
3	sperm	punláy ( <i>punlâ</i> ng buhay)
4	sperm cell	sihay-punláy
5	semen, seminal fluid	danupunláy ( <i>danúm</i> ng <i>punláy</i> ) (tamód)
6	seminal vesicle	punlayan
7	scrotum	kasuputan
8	testis, testicle	bilo (bayág)
9	penis	tunod (titi)
10	glans penis	ulo ng tunod
11	prepuce	bilot
12	vas deferens	anuráng-punláy
13	epididymis	punò ng anuráng-punláy
14	erection	paninigás
15	orgasm	kasukdulán
16	ejaculation	paglabás
17	sexual reproduction	sáriing balisuplingan
18	sexual intercourse	sáriing talamitan
19	coitus	siping (hindutan)
20	libido	iyág (libog)
21	masturbation (male)	sarigawâ (pagsasalsál)
22	venereal disease	sáriing balatian, balatiang lihi
23	sterile	baóg
24	sterility of the male	pagkábaóg ng lalaki
25	idiotic children	ungás na mgá batà
26	anatomy of the sexual organs	katwanan ng mgá sáriing tatag

PAMBABAENG BALISUPLINGING KAAYUSÁN  
(*Female Reproductive System*)

1	female genital region	pambabaing balisuplinging tatag
2	genitalia, genitals	pamalisuplín (pambalisuplín)
3	embryo	bilíg
4	ovum, ova	itlóg, mgá itlóg
5	ovary	itlugan
6	fallopian tube, uterine tube	anuráng-itlóg
7	ovarian fimbria	punò ng anuráng-itlóg
8	uterus	bahay-batà
9	cervix uterine	líng-liigan ng bahay-batà
10	cervical canal	líng-liigang taguling
11	internal orifice	panloób na búkasan
12	external orifice	panlabás na búkasan
13	vagina	kaluban (puki, kiki)
14	external genitalia	panlabás na pamalisuplín
15	vulva	haráp

16	clitoris .....	kuntíl (tinggil)
17	prepuce of clitoris .....	bilot ng kuntíl
18	labia minora .....	labing panloób
19	labia majora .....	labing panlabás
20	hymen .....	lamad
21	vaginal orifice .....	búkasan ng kaluban
22	urethral orifice .....	búkasan ng ihián
23	mons pubis .....	puklô
24	mons veneris .....	puklô ng babae
25	pubic hair .....	bulból
26	menstruation .....	búwanan
27	menstrual flow .....	búwanang daloy (dalaw)
28	dysmenorrhea .....	masakít na datnán
29	oligomenorrhea .....	mahinang datnán
30	menopause .....	tumigil datnán
31	ovulation .....	saitlóg
32	fertilization .....	sapuniâ
33	fertilized ovum .....	napunlaáng itlóg
34	abortion .....	paghulog, palaglág
35	implantation .....	sataním
36	placenta .....	inunan
37	placentation .....	sainunan
38	secretion .....	yago
39	internal secretion .....	panloób na yago
40	masturbation (female) .....	sarigawâ
41	puberty .....	múlansuplingan
42	age of puberty .....	gulang ng múlansuplingan
43	parturition .....	panganganák
44	birth control .....	supil-suplíng, supil sa panganganák

# HÁYKAPNAYAN

(Biochemistry)

1	biochemistry	háykapnayan
2	biochemical	háykapnayin
3	biochemist	háykapnayanon
4	digestion	satunaw
5	digest (v.)	satunawin
6	indigestion (tech.)	dísatunaw
7	absorption	pagsigom
8	circulation	paglibot
9	excretion (system)	pálúwasan
10	metabolism	kapbisà
11	anabolism	kapyarì
12	catabolism	kapsirà
13	imbibition	pamiminúm
14	osmosis	pananagós
15	diffusion (of molecules)	panunuót
16	decay (first, odoriferous stage)	pagkábulók
17	decay (final, non-odoriferous stage)	pagkádunot
18	decomposition (natural process)	pagkáagnás
19	fermentation	pamamanis, pagkápanis
20	ferment (n.)	pamanis
21	ferment (v.)	panisin
22	fermented	panís
23	oxidation (chem.)	sadagisik
24	oxygenate	oksihinán
25	oxygenation	saoksihén
26	amino acid	amino asid
27	carbohydrate	karbohaydrát
28	xanthophyll	diláwdinsól
29	chlorophyll	luntidinsól
30	chloroplast	luntikatwán
31	mitochonrion, chondriosome	sulídlawas
32	hydrolysis	tubigbilos
33	Law of Partition	Batás ng Paghahati

# HÁYSUGNAYAN

(*Biophysics*)

1	biophysics .....	háysugnayan
2	biophysical (1) .....	háysugnayin
3	biophysical (2) .....	háysugnayanin
4	radiation (radioactive) .....	dagiláp (Mat. Tag.)
5	radioactivity .....	karagilapán
6	röntgen ray .....	sinag-róndiyén
7	ionization (of gases) .....	sadagipik
8	radiology .....	paládiglapan
9	optical system .....	kaayusáng súgaanin
10	vision .....	pananáw
11	color vision .....	pananáw-kulay
12	color sensation .....	karandamáng-kulay
13	colorimeter .....	kulaysukat
14	spectrum, spectra .....	balangáw
15	spectrometer .....	balngawsukat
16	chromatic aberration .....	kúlaying baltík
17	spherical abberation .....	timbúluging baltík
18	active light .....	mabilos na sugâ
19	biophysically active light .....	paháysugnayaning mabilos na sugâ
20	photochemical activity .....	sugkapnaying kabilusan
21	surface .....	dayag
22	surface energy .....	kusóg-dayag
23	permeability .....	katulutan
24	permeable .....	matulot
25	impermeable .....	dímatulot
26	semi-permeable, differentially permeable ....	hafímatulot
27	brain waves .....	mgá liboy ng utak
28	brain potential .....	kaigtingán ng utak
29	nerve .....	dagandam
30	nerve response .....	tugón ng dagandam
31	nerve stimulus .....	ganyák ng dagandam
32	nerve impulse .....	pitlág ng dagandam
33	auditory (adj.) .....	dínigin
34	auditory sensation .....	díniging karandamán
35	stimulating electrode .....	pangganyák na dagindás
36	tropism .....	baling
37	positive tropism .....	tahás na baling

38	negative tropism .....	balíng na baling
39	phototropism .....	sugbaling
40	geotropism .....	dagbaling

# HAYNAYANING GAMIT SA PÁNALIKSIKÁN

(*Biological Laboratory Equipment*)

## MGÁ BAHAGÌ NG LAMBALANG MIKSIPAT

(*Parts of the Compound Microscope*)

1	microscope .....	miksipat
2	simple microscope .....	payák na miksipat
3	compound microscope .....	lambalang miksipat
4	eyepiece, ocular .....	panipat
5	objective .....	panakláv
6	low power objective .....	mahinang panakláv
7	high power objective .....	malakás na panakláv
8	oil immersion objective .....	tubóg-langís na panakláv
9	draw tube .....	hílahing tubo
10	body tube .....	katawáng tubo
11	rack .....	kangipnán
12	pinion .....	ngiplóng ( <i>ngipin + gulóng</i> )
13	coarse adjustment .....	daglíng pahasay
14	fine adjustment .....	dahang pahasay
15	dust shield .....	pananggáng-alikabók
16	handle, arm .....	hawakán
17	inclination joint .....	sugpóng-panghilig
18	revolving nosepiece .....	ikuting panakláv
19	clip .....	pang-ipit
20	stage .....	tanghalan
21	mechanical stage .....	sigmuing tanghalan
22	substage .....	kúbtanghalan
23	iris diaphragm .....	alíkmatà
24	Abbe condenser .....	pangintáy-Abbe
25	substage adjustment .....	kúbtanghaling pahasay
26	pillar .....	patindíg
27	mirror .....	salamín
28	plane mirror .....	lapyáng salamín
29	concave mirror .....	malukóng na salamín
30	base .....	takad

## MGÁ GAMIT SA GÁWAING MIKSÍPATIN

(Equipment for Microscopy Work)

1	micrometer eyepiece .....	miksúkating panipat
2	stereoscopic microscope .....	buuksípating miksipat
3	binocular .....	duhansipat
4	dissect .....	nisnisín
5	dissection (process) .....	pánisnisan
6	dissecting microscope .....	nisnisang miksipat
7	micrometer stage .....	miksúkating tanghalan
8	bottle, wide mouthed .....	bote, dakumbunganga
9	funnel .....	balisunsóng
10	dissecting needle .....	panisnís na dagom ( <i>dagom</i> , Bis.)
11	iron stand .....	kapitáng-bakal
12	magnifier tripod .....	tungkô ng pandakô
13	blade .....	talím
14	micro-burner .....	mik-ápuyan
15	Bunsen burner .....	ápuyang Bunsen
16	microscopic cover glass .....	miksípating takíp-lahirán
17	microscopic slide .....	miksípating lahirán
18	medicine dropper .....	pamaták-gamót
19	plain slide .....	awáng lahirán
20	prepared slide .....	handáng lahirán
21	slide box .....	kahóng-lahirán
22	forceps .....	panipit
23	petri dish .....	pinggáng petri
24	test tube .....	subukáng tubo
25	test tube holder .....	panghawak ng subukáng tubo
26	test tube brush .....	panlinis ng subukáng tubo
27	test tube rack .....	tugdayan ng subukáng tubo
28	graduated cylinder .....	ginatlaáng bumbóng
29	wire gauze .....	kawad-lambát
30	thistle tube .....	mikbansí
31	rubber tubing .....	tubong goma
32	cork .....	tapón
33	rubber stopper .....	tapóng goma
34	small towel .....	maliít na tuwalya
35	utility clamp .....	pamigil
36	match .....	pósporó
37	magnifying lens .....	pandakóng paningob

## MGÁ BAHAGÌ NG ISÁNG TANGKÁS NG PANISNÍS

*(Parts of the Dissecting Set)*

1	dissection (process) .....	pánisnisan
2	dissecting set .....	panisnís na tangkás
3	dissecting table .....	pánisnisán
4	metric ruler .....	súkating galod
5	hocks and chains .....	kawit at tanikalâ
6	medium-sized forceps with curved points ....	katamtamang panipit na baluktót ang dulo
7	medium-sized forceps with straight points ....	katamtamang panipit na tuwíd ang dulo
8	scalpel .....	panlaslás
9	fine scissors .....	maliít na guntíng
10	coarse scissors .....	malakíng guntíng
11	dissecting needle .....	panisnís na dagom
12	blow pipe .....	ihip, pang-ihip
13	hand lens .....	paningob-kamáy, pangkamáy na paningob
14	dissecting probe, sharp pointed .....	panisnís na panghalughóg, matulis
15	dissecting probe, blunt pointed .....	panisnís na panghalughóg, mapuról
16	cannula .....	miktubo

## SAMUTSARING GAMIT SA PÁNALIKSIKÁN

*(Miscellaneous Laboratory Equipment)*

1	locker .....	taguán
2	beaker .....	lumbô
3	dissecting pan .....	nisnisang sahod
4	laboratory gown .....	kasuutáng panaliksík
5	insect pin .....	aspilíng-kulisáp
6	mounted skeleton .....	iniakmáng kalansáy
7	preparation dish .....	pinggáng panghandâ
8	spatula .....	(pang) halukalat ( <i>halò + kalat</i> )

# 6

## ULNAYAN

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Dalúb-Ulnungan . . . . .	196
Kasaysayan . . . . .	202
Dalúbtáuhan . . . . .	206
Dalúbláhian . . . . .	208
Ágimatan . . . . .	210
Dalúbbátasan . . . . .	217
Dalúbbanwahan . . . . .	222
Pánulatan . . . . .	228
Dalúbwíkaan . . . . .	237
Dalúb-Ísipan . . . . .	240

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## DALÚB-ULNUNGAN

(Sociology)

1	sociology	dalúb-ulnungan
2	social science	ulnayan ( <i>ulnóng + hánayan</i> )
3	society (the social order)	ulnóng (Mat. Tag.)
4	society (the leisure class)	lipunán
5	decadent society	namumulók na ulnóng
6	the elite	kapilián
7	ruling elite	namamahalang kapilián
8	middle class	panggitnang uri
9	layer, stratum	saray (NSL)
10	community	pámayanán
11	social (1) (adj.) (gen. sense)	ulnungin
12	social (2) (adj.) (lim. sense)	panlipunán
13	social (3) (adj.) (pert. to studies)	ulnayin, ulnayanin
14	social study	ulnaying pag-aaral
15	social pressure	ulnunging budlóng
16	social scientist	ulnayanon
17	social science worker	mang-uulnáy
18	social worker	manggagawang panlipunán
19	sociologist	dalúb-ulnóng
20	sociological worker	mang-uulnóng
21	sociological (adj.)	dalúb-ulnungin
22	social philosophy	ulnaying batnayan
23	socioeconomic	ulnuágimatin
24	sociopolitical	ulnubanwahin
25	sociocultural	ulnukalnangín
26	socioreligious	ulnuágamahin
27	socialize	saulnungin
28	socialized medicine	sinaulnóng panggagamót
29	societal	ulnungín
30	sociable	halubilo
31	sociability	pagkáhalubilo
32	social life	ulnunging buhay
33	community life	buhay pampámayanán
34	Philippine social life	ulnunging buhay sa Pilipinas
35	Philippine community life	buhay pampámayanán sa Pilipinas
36	social living	ulnunging pamumuhay
37	community living	pamumuhay na pampámayanán

38	public institution .....	pangmadláng tátagin
39	social institution .....	ulhunging tátagin
40	social problem (1) .....	ulhunging súliranín
41	social problem (2) .....	panlipunáng súliranín
42	social security .....	ulhunging kapanatagán
43	social research .....	ulhunging pananaliksík
44	social justice .....	ulhunging katarungán
45	social movement .....	ulhunging kilusán, ulhunging adhikaan
46	social register .....	tálaang panlipunan
47	social force .....	ulhunging isig
48	social development (1) .....	ulhunging kaunlarán
49	social development (2) .....	ulhunging saunlád
50	social welfare .....	ulhunging kagalingan
51	social service .....	ulhunging lingkód
52	superorganic .....	hignayin
53	urban .....	panlunsód, lunsurin
54	rural .....	pangkabukirán, kabukiranin
55	urban sociology .....	lunsuring dalúb-ulnungan
56	rural sociology .....	kabukiraning dalúb-ulnungan
57	social disorganization .....	ulhunging pagkakáwaták-waták
58	mass, masses .....	santao (mgá santao)
59	barrio, village .....	nayon
60	locality .....	poók
61	local (1) .....	pandito
62	local (2) .....	pampoók
63	district .....	purók
64	hamlet .....	bahayán
65	relief (1) (concrete) .....	paginhawa
66	relief (2) (abstract) .....	ginhawa
67	rescue .....	pagligtás
68	relief worker .....	manggagawang paginhawa
69	rescue worker .....	manggagawang panligtás
70	field worker .....	kawaníng (manggagawang) panlarangan (panlabás)
71	relief goods .....	paginhawang bílin
72	poverty .....	karukhaán
73	poor .....	dukhâ, mahirap
74	indigence .....	dálitâ
75	indigent .....	marálitâ
76	underprivileged .....	abâ
77	influence .....	hibò (PSL)
78	geared to .....	nakatakod sa (Bis.)
79	keystone .....	tuntungang bató

<b>80</b>	intense desire, intention, ambition .....	adhikâ
<b>81</b>	movement, campaign .....	kilusán, adhikaan
<b>82</b>	education (1) (system) .....	páturuán, edukasyón
<b>83</b>	education (2) (learning) .....	katuruan
<b>84</b>	universal education .....	páturuáng panlahát
<b>85</b>	general education .....	katuruáng lahatán
<b>86</b>	vocational education .....	katuruáng panghanapbuhay
<b>87</b>	kindergarten school .....	láruang páaralán
<b>88</b>	instruction (1) (teaching) .....	pagtuturò
<b>89</b>	instruction (2) (rule) .....	panuto
<b>90</b>	public instruction .....	pagtuturong pangmadlâ
<b>91</b>	teacher .....	gurò (Gro.)
<b>92</b>	head teacher .....	ulong-gurò (U/Gro.)
<b>93</b>	principal (teacher) .....	punong-gurò (P/Gro.)
<b>94</b>	instructor .....	dalúbturò (Dtro.)
<b>95</b>	assistant instructor .....	kawaksíng dalúbturò (Kwk. Dtro.)
<b>96</b>	professor .....	dalúbgurò (Dgro.)
<b>97</b>	assistant professor .....	kawaksíng dalúbgurò (Kwk. Dgro.)
<b>98</b>	associate professor .....	kasamang dalúbgurò (Kas. Dgro.)
<b>99</b>	professional lecturer .....	dalúbguruing tagápanayám
<b>100</b>	professor emeritus .....	higlingkuring dalúbgurò
<b>101</b>	honor (1) (abstract) .....	dangál, karángalan
<b>102</b>	honors (2) (ceremonial) .....	parangál
<b>103</b>	praise .....	papuri
<b>104</b>	first honor, first honors .....	unang parangál (hindî "unang karángalan")
<b>105</b>	second honor, second honors .....	ikalawáng parangál (hindî "ikalawáng karán- galan")
<b>106</b>	honorable mention .....	parángaling banggít (hindî "karángalang banggít")
<b>107</b>	highest honors .....	pinakámataás na parangál
<b>108</b>	with highest honors .....	may pinakámataás na parangál
<b>109</b>	laude .....	papuri
<b>110</b>	cum laude .....	may papuri
<b>111</b>	magna cum laude .....	may dakilang papuri
<b>112</b>	summa cum laude .....	may sukdulang papuri
<b>113</b>	statement .....	saád
<b>114</b>	state (v.) .....	isaád
<b>115</b>	saying (n.) .....	sabi, kasabihán
<b>116</b>	say (v.) .....	sabihin
<b>117</b>	recitation .....	pagsasalaysáy
<b>118</b>	recite a poem .....	bumigkás ng tulâ
<b>119</b>	recite a lesson .....	isalaysáy ang aralín
<b>120</b>	evaluation .....	paghahalgá

121	evaluate .....	halgahán
122	evaluator .....	tagahalgá
123	nature of man .....	likás (kalikasán) ng tao
124	scholar (1) .....	paláarál (maalam)
125	scholar (2) .....	páaralín (taong pinag-aaral)
126	scholarship (1) .....	pagkápaláarál
127	scholarship (2), grant .....	paaral
128	thinker .....	paláisíp
129	position (stand) .....	paninindigan
130	memorandum, memo .....	paandám
131	information .....	pabatíd
132	information sheet .....	talábatiran
133	inform .....	ipabatíd
134	announcement .....	paalám
135	announce .....	ipaalám
136	notice .....	patalastás
137	notify .....	ipatalastás, pátalastasán
138	bulletin .....	pabalità
139	circular .....	palibot
140	circular letter .....	palibot-sulat, palibot-liham
141	symposium .....	sampaksaan
142	lecture .....	panayám
143	lecture meeting .....	panayamán
144	seminar .....	binhísipan
145	speech .....	talúmpati
146	keynote speech .....	diwampati
147	opening remarks .....	bukáspati
148	welcome speech .....	bungadpati
149	farewell speech .....	hulímpati
150	closing remarks .....	wakáspati
151	eulogy .....	luksampati
152	celebration .....	pagdiriwang
153	pageant .....	paringál
154	program (in honor of somebody or something) .....	parangál
155	parade (military) .....	patikas
156	review (military) .....	pamasíd
157	program (activities done on a stage) .....	palátuntunan
158	program(schedule of work) .....	palágawaan
159	program (sheet or printed guide) .....	talátuntunan
160	program of study .....	talátuntunan ng pag-aaral
161	program (of a work of a movement) .....	paláadhikaan

<b>162</b>	written or printed program of a movement ...	taláadhikaan
<b>163</b>	topic .....	paksâ
<b>164</b>	theme .....	paksândiwà
<b>165</b>	thesis .....	tikhâ, katikhaán
<b>166</b>	term paper .....	sultaning ( <i>sulat + taning</i> )
<b>167</b>	subject .....	kapaksaán
<b>168</b>	assignment .....	takdáng-aralín
<b>169</b>	lesson .....	aralín
<b>170</b>	unit of a course .....	paksáng-aralín
<b>171</b>	curriculum .....	taláaralán
<b>172</b>	curriculum-making .....	paláaralán
<b>173</b>	syllabus .....	talápaksaan
<b>174</b>	course (career) .....	kaaralán
<b>175</b>	course .....	talásunuran
<b>176</b>	course of study .....	talásunuran ng aralán
<b>177</b>	pedagogy .....	paláaralán
<b>178</b>	interview (n.) .....	pakikipanayám
<b>179</b>	interview (v.) .....	kapanayamín
<b>180</b>	education reform .....	mulinyóng pantúruan
<b>181</b>	improvement (act of improving) .....	pabuti, pagbuti
<b>182</b>	improve .....	pabutihin
<b>183</b>	orientation .....	satungo
<b>184</b>	reorientation .....	mulíntungo
<b>185</b>	construction .....	sayarî
<b>186</b>	reconstruction .....	mulínyarî
<b>187</b>	amusement .....	paglilibáng, líbangan
<b>188</b>	entertainment .....	pag-aalíw, áliwan
<b>189</b>	dissipation .....	paglilimayón
<b>190</b>	recreation .....	mulínsiglá
<b>191</b>	recreation place .....	mulínsiglahan
<b>192</b>	mission .....	pabahalà
<b>193</b>	commission .....	kabahalaán
<b>194</b>	Public Service Commission .....	Kabahalaán ng Lingkurang-Madlâ
<b>195</b>	commissioner .....	kabahalà
<b>196</b>	utility (org.) .....	págamitan
<b>197</b>	public utility .....	págamitang-madlâ
<b>198</b>	Public Administration .....	Pángasiwaáng-Madlâ
<b>199</b>	human relations .....	pakikitungong-tao, pakikisama
<b>200</b>	public relations .....	pakikitungong-madlâ, pakikisamang-madlâ
<b>201</b>	relation .....	ugnayin, kaugnayán
<b>202</b>	development (1) .....	kaunlarán
<b>203</b>	development (2) .....	saunlád, páunlaran
<b>204</b>	progress .....	pagsulong, sasulong

<b>205</b>	progressive .....	masulong
<b>206</b>	care .....	arugâ, andukhâ
<b>207</b>	general education .....	lahatáng katuruan
<b>208</b>	academy (school) .....	talisikan
<b>209</b>	academy (for research) .....	linangan
<b>210</b>	academic (adj.) .....	pantalisikan, talisiknin
<b>211</b>	academic freedom .....	kalayáang pantalisikan, talisikning kalayáan
<b>212</b>	institute (school) .....	dalúbhasaán
<b>213</b>	institute (for research) .....	surián
<b>214</b>	institute (for development) .....	dalúb-unlaran
<b>215</b>	educator .....	pahámturò
<b>216</b>	overcoat .....	híndaramít
<b>217</b>	expert .....	dalúbhasà
<b>218</b>	expertise .....	kadalúbhasaán
<b>219</b>	special .....	tangi
<b>220</b>	specialized .....	sinatangi
<b>221</b>	specialist .....	dalúbtangi
<b>222</b>	specialty .....	katangian
<b>223</b>	specialization .....	satangi
<b>224</b>	detailed .....	masaliksik
<b>225</b>	detail .....	kásaliksikán
<b>226</b>	complicated .....	masalimuot
<b>227</b>	complication .....	kásalimuutan
<b>228</b>	complex .....	mahugnáy
<b>229</b>	office (1) .....	tungkulan
<b>230</b>	office (2) .....	tanggapan
<b>231</b>	office (3) .....	tungkulin

# KASAYSAYAN

(History)

1	history .....	kasaysayan
2	historical (1) .....	makasaysayan
3	historical (2) .....	pangkasaysayan, makasaysayin
4	origins .....	kasimulán
5	precedent .....	kásumundán
6	civilization .....	kabihasnán
7	contemporary .....	kapanahón
8	contemporary civilization (1) .....	kapanahóng kabihasnán
9	contemporary civilization (2) .....	kasalukuyang kabihasnán
10	leader .....	pamunò
11	king .....	hari
12	queen (married) .....	hariginang, reyna
13	queen (unmarried) .....	haribini, reyna
14	prince .....	lakán, prinsipé
15	princess .....	lakámbini, prinsesa
16	gentleman .....	ginoó
17	knight .....	maginoó
18	lady .....	ginang
19	miss (unmarried woman) .....	binibini
20	husband .....	banà (Bis.)
21	dynasty .....	halarì ( <i>halayháy</i> ng mgá hari)
22	Ming Dynasty .....	Halaring Ming
23	dynast .....	halhari
24	dynastic war .....	halaring digmaan
25	ally .....	kapanig
26	battle cry .....	siglaban
27	prewar .....	dípa-digmâ
28	postwar .....	págka-digmâ
29	Pre-Spanish period .....	dípa-Kastilang panahón
30	succession (of rulers) .....	hálininán (ng mgá naghahari)
31	kingdom .....	kaharián
32	emperor .....	gahum, bagindá, emperadór
33	empire .....	kagahaman, kabagindahán, imperyo
34	period (chronology) .....	puktól
35	epoch .....	daktión
36	era .....	higtión
37	age (hist.) .....	kapanáhanan

38	decade .....	pultaón
39	century .....	dantaón
40	millenium .....	libuntaón
41	Before Christ (B.C.) .....	Bago kay Kristo (B.K.)
42	Anno Domini (A.D.) .....	Mulâ kay Kristo (M.K.)
43	conquest .....	paglupig, panlulupig, lupig
44	conquer (v.) .....	lupigin
45	conqueror .....	manlulupig
46	tradition .....	kámihasnán
47	traditional .....	kinamihasnán
48	habit .....	ugali
49	custom .....	kaugalián
50	accustomed .....	kinaugalián
51	culture .....	kalinangán
52	religion .....	ágamahan (Mar.), relihiyón
53	practice .....	kinagawián
54	rite .....	gali
55	ceremony .....	galian
56	ceremonial place .....	galián
57	faith .....	pananámpalataya
58	Christianity .....	Kakristuhan, Pagkámakákristo
59	church .....	simbahan
60	state (n.) (pol. org.) .....	banwá
61	country .....	bayan
62	mother country .....	inámbayan
63	colony .....	sakupbayan
64	colonial .....	sakupbayanin, sakupin
65	colonial relations .....	sakupbayaning ugnayan
66	colonial system .....	sákuping kaayusán
67	decolonize .....	hisakupin
68	neocolonial .....	bagunsákupin
69	neocolonialism .....	pagkámakábagunsákupin
70	imperialism .....	pagkámakágahum
71	land .....	lupa
72	territory .....	lupaín
73	government .....	pámahalaán
74	civil government .....	bayanhing pámahalaán
75	military government .....	hukbuhing pámahalaán
76	law .....	batás
77	constitution .....	saligambatás
78	sovereignty .....	kahigpunuan
79	policy .....	pátakarán
80	ideology .....	palákuruán

81	trade (n.)	báliwasan
82	commodity	kalakal
83	product	laláng, bunga
84	goods	bíihin
85	exchange (n.)	pálitan
86	barter (n.)	túwayan ( <i>tuway</i> , NSL)
87	buy	bumilí
88	sell	magbilí, ipagbilí
89	commerce	kálakalán, pangangalakal
90	industry	kalaláng
91	agriculture	pagsasaká, sákahán
92	natural resources	likás na yaman
93	mineral resources	lupangkaping yaman
94	race	lahì
95	tribe	lipì
96	primitive	baruwáng (Mar.)
97	immigration	sulúdbayan
98	emigration	luwásbayan
99	the sources	ang mgá batis
100	source material (hist.)	kasulatáng-batis
101	vice (org.)	pulí
102	assistant	kawaksí
103	deputy	pangalawá
104	peace	kapayapaan
105	silence	katahimikan
106	order (in a community)	katiwasayán
107	security	kapanatagán
108	safety	kaligtasan
109	harmony	kasuwatuán
110	stability	katatagán
111	prosperity	kaniguan
112	abundance	kasaganaan
113	welfare	kagalingan
114	interest (social)	kapakanán
115	advantage	kalamangán
116	urban	panlunsód, lunsurin
117	rural	pangkabukirán, kabukiranin
118	barrio, village	nayon
119	community	pamayanán
120	locality	poók
121	local	pampoók
122	district	purók

<b>123</b>	hamlet .....	bahayán
<b>124</b>	town .....	bayan, balén
<b>125</b>	townmate .....	kabayan, kabalén
<b>126</b>	downtown .....	kabayanan, kabalinán
<b>127</b>	midtown .....	gitnambayan, gitnambalén
<b>128</b>	uptown .....	dulumbayan, dulumbalén
<b>129</b>	province .....	lalawigan
<b>130</b>	city .....	lunsód
<b>131</b>	capital city .....	ulunlunsód
<b>132</b>	chief city .....	punong lunsód
<b>133</b>	main city .....	pángunahing lunsód
<b>134</b>	metropolis .....	daklunsód

## DALÚBTÁUHAN

(Anthropology)

1	anthropology .....	dalúbtáuhan
2	culture .....	kalinangán
3	sociocultural .....	ulnukalnangin
4	demography .....	talásantauhan
5	way .....	gawî
6	habit .....	ugali
7	custom .....	kaugalián
8	faith .....	pananámpalataya
9	religion .....	ágamahan, relihiyón
10	theology .....	bathálaan
11	rite .....	galî
12	ceremony .....	gálian
13	ceremonial place .....	galián
14	folkway .....	gawimbayan
15	folk dance .....	sayawimbayan
16	folk song .....	awitimbayan
17	folk music .....	tugtugimbayan
18	folk tale .....	kuwentumbayan
19	folklore .....	alamimbayan
20	folk hero .....	bayanimbayan
21	background .....	sanligan
22	base (abstract) .....	saligán
23	support .....	sandigan
24	environment .....	kaligirán
25	heredity .....	kamanahan
26	inheritance .....	mana, mánahan
27	legacy .....	pamana
28	education .....	katuruán
29	training (act of) .....	pagsasanay
30	training (formal course) .....	pásanayan
31	training (place or institution) .....	pásanayán
32	training (gerund) .....	nagsasanay
33	training (special education) .....	pinagsanayan
34	training (experience) .....	kasanayán
35	man .....	tao
36	mankind .....	sangkatauhan
37	giant .....	hintatao

38	great man .....	daktao
39	superman .....	higtao
40	human (n.) .....	tao
41	human (adj.) .....	táuhin
42	nonhuman (n.) .....	dítao
43	nonhuman (adj.) .....	dítáuhin
44	humane .....	makatao
45	inhumane .....	dímakatao
46	humanity .....	sangkatauhan
47	humanities .....	katuruáng-tao
48	humanism .....	paláturuang-tao
49	humanistic .....	makáturuang-tao
50	humanitarian .....	mapagkáwanggawâ
51	humanitarianism .....	palámakatauhan
52	natural (adj.) .....	likás
53	unnatural (adj.) .....	dílikás
54	supernatural .....	higlikás
55	real .....	tunay
56	unreal .....	dítunay
57	realistic .....	túnayin, makatunay
58	unrealistic .....	dítunayin, dímakatunay
59	artificial .....	gawá-gawâ, artipisyál
60	synthetic .....	lagumlalangin
61	synthesize (v.) .....	lagumlalangín
62	period (chronology) .....	puktól
63	epoch .....	daktiún
64	era .....	higtiún
65	age (hist.) .....	kapanáhan
66	decade .....	pultaón
67	century .....	dantaón
68	millenium .....	libuntaón
69	Before Christ (B.C.) .....	Bago kay Kristo (B.K.)
70	Anno Domini (A.D.) .....	Mulâ kay Kristo (M.K.)
71	library .....	silíd-aklátan
72	reading room .....	silíd-basahán
73	Art and History Division .....	Sangáy ng Sining at Kasaysayan
74	Administration Division .....	Sangáy ng Pángasiwaan
75	Accounting (office) .....	Pátuusán
76	Budget (office) .....	Talágugulán
77	Procurement (office) .....	Pángalapán
78	Curator .....	Agsinop
79	Office of the Director .....	Tanggapan ng Patnugot

## DALÚBLÁHIAN

(Ethnology)

1	ethnology .....	dalúbláhian
2	ethnography .....	találáhian
3	ethnographic .....	találáhiin
4	ethnic .....	láhiin
5	ethnic relation .....	láhiing kaugnayán
6	race .....	lahì
7	subrace .....	kublahì
8	tribe .....	lipì
9	clan .....	angkán
10	family .....	mag-anak
11	the brown race .....	ang lahing kayumanggi
12	the Austronesian race .....	ang lahing Sampuluanin
13	the Malay subrace .....	ang kublahing Malay
14	the Malatagalog subrace .....	ang kublahing Malátagalog
15	Caucasian .....	Kawkasin
16	Caucasoid .....	Malákawkas
17	Mongolian .....	Munggolin
18	Mongoloid .....	Malámunggól
19	Malay .....	Maláy
20	Malayan .....	Malayin, Maláyo
21	Asia .....	Asya
22	Asian .....	Asyahin, Asyano
23	Malaysia .....	Malasya
24	Malaysian .....	Malasyahin, Malasyano
25	Europe .....	Yuropa
26	European .....	Yuropin, Yuropeyo
27	Africa .....	Áprika
28	African .....	Áprikahin, Áprikano
29	Arabia .....	Arabya
30	Arab .....	Arab
31	Arabian .....	Arabyahin, Arabyano
32	Indonesia .....	Indonesya
33	Indonesian .....	Indonesyahin, Indonesyano
34	Polynesia .....	Dampuluán, Polinesya
35	Polynesian .....	Dampuluanin, Polinesyano
36	Melanesia .....	Tímpuluán, Melanesya
37	Melanesian .....	Tímpuluanin, Melanesyano

<b>38</b>	Micronesia .....	Mikpuluán, Maykronesya
<b>39</b>	Micronesian .....	Mikpuluananin, Maykronesyano
<b>40</b>	Malayo-Polynesian .....	Maláy-Dampuluanin, Maláyo-Polinesyano
<b>41</b>	Austronesia .....	Sampuluán, Awstronesya
<b>42</b>	Austronesian .....	Sampuluanin, Awstronesyano
<b>43</b>	Oceania .....	Karagatnán (Karagatanán)
<b>44</b>	the Oceanic race .....	ang lahing Karagatnín
<b>45</b>	the American race .....	ang lahing Amerikahín, ang lahing Amerikano
<b>46</b>	migration .....	ngibámbayan
<b>47</b>	racial migration .....	láhiing ngibámbayan
<b>48</b>	migratory .....	ngibambáyanin
<b>49</b>	emigration .....	luwásbayan
<b>50</b>	emigrate .....	lumuwásbayan
<b>51</b>	emigrant .....	mánluluwásbayan
<b>52</b>	immigration .....	sulúdbayan
<b>53</b>	immigrate .....	sumulúdbayan
<b>54</b>	immigrant .....	mánunulúdbayan
<b>55</b>	racial trait .....	láhiing panangi
<b>56</b>	racial characteristic .....	láhiing katángian
<b>57</b>	racial stock .....	láhiing múlanan
<b>58</b>	minority .....	nakauuntí, kauntian, kalit-an
<b>59</b>	majority .....	nakararami, karamhan, kalakhan
<b>60</b>	national minority .....	pambansáng nakauuntí
<b>61</b>	racial minority .....	láhiing nakauuntí
<b>62</b>	cultural minority .....	kalinangíng nakauuntí
<b>63</b>	minority problem .....	súliranín ng nakauuntí
<b>64</b>	period (chronology) .....	puktól
<b>65</b>	epoch .....	daktión
<b>66</b>	era .....	higiún
<b>67</b>	age (hist.) .....	kapanáhanan
<b>68</b>	decade .....	pultaón
<b>69</b>	century .....	dantaón
<b>70</b>	millenium .....	libuntaón
<b>71</b>	Before Christ (B.C.) .....	Bago kay Kristo (B.K.)
<b>72</b>	Anno Domini (A.D.) .....	Mulã kay Kristo (M.K.)

# ÁGIMATAN

(Economics)

1	economics .....	ágimatan
2	economist .....	dalúb-ágitat
3	economy (1), thrift .....	ágitat (Mat. Tag., NSL p. 4)
4	economy (2) .....	kapamuhayan
5	economic .....	ágimatin
6	economic system .....	ágimating kaayusán
7	socioeconomic .....	ulnuágimatin
8	technology .....	aghímuan
9	livelihood .....	kabuhayan
10	ecology .....	palámuhayán
11	human ecology .....	táuhing palámuhayán
12	natural resources .....	likás na kayamanan
13	agriculture .....	sákahan (dalúbsákahan)
14	farming .....	pagsasaká
15	agriculturist .....	dalúbsaka
16	agricultural, agrarian .....	sákahanin
17	farm .....	sakahán
18	manpower .....	lakás-tao
19	manpower service (1) (agency) .....	lingkurang lakás-tao
20	manpower service (2) (service) .....	lakás-taong lingkód
21	agent (abstract) .....	kinabisà
22	agency (abstract) .....	kábisaán
23	agent (concrete) (representative) .....	kinagawâ
24	agency (concrete) .....	kágawaán
25	population .....	santauhan
26	profession .....	pánungkulán
27	position (in an org.) .....	katungkulán
28	professional (n.) .....	mánunungkulan
29	professional (adj.) .....	pánungkulin
30	professional service .....	pánungkuling lingkód
31	professional fee .....	pánungkuling bayad
32	professional training .....	pánungkuling pagsasanay
33	professional education .....	pánungkuling katuruán
34	per capita .....	bawa't ulo
35	underdeveloped .....	dípaunlád, maláunlád
36	developing .....	papaunlád
37	development .....	saunlád

38	capitalistic development .....	puhunaning saunlád
39	standard of living .....	pámantayan ng pamumuhay
40	stability .....	katatagán
41	prosperity .....	kaniguan
42	abundance .....	kasaganaan
43	welfare .....	kagalingan
44	interest (social) .....	kapakanán
45	vested interest .....	nagbatóng kapakanán
46	advantage .....	kalamangán
47	income .....	kita
48	revenue .....	kitambayan
49	tax .....	buwís
50	taxation .....	pámuwisan
51	compensation .....	bigáypalà
52	gratuity .....	gantímpagál
53	tip .....	pabuyà
54	financing measure .....	pampananalapíng hakbáng
55	expenditure .....	gugulín
56	budget (amount of money) .....	talágugulín
57	appropriation .....	laánggugulín
58	shop (working place) .....	gáwaan
59	factory, works .....	págawaan
60	factory onwer, manufacturer .....	maypágawaan
61	laboratory .....	pánaliksikán
62	work (abstract) .....	gáwain
63	work (concrete) (product) .....	gawã
64	public works .....	gawaimbayan
65	infrastructure .....	sulúdkayarián
66	feeder roads .....	daáng pahaláng
67	handicraft .....	gamláng (NSL)
68	industry .....	kalaláng
69	industrialist .....	mángangalaláng
70	industrial .....	kálalangin, pángalaláng
71	agri-industrial .....	saka-kálalangín
72	industrial plant .....	kálalangán, plantang pángalaláng
73	industrial accident .....	sakunáng kálalangín
74	industrialize .....	kalalangín, isákalaláng, sákalalangín
75	industrialization .....	pagsasákalaláng, sakalaláng
76	commerce .....	kálakalán, pangangalakal
77	commercial .....	kálakalín
78	commodity .....	kalakal
79	goods .....	bíihin
80	import (n.) .....	angkát

81	export (n.)	luwás
82	export crop	luwasing ani
83	importer	tagáangkát
84	exporter	tagáluwás
85	producer	tagálaláng
86	trade (n.)	báliwasan
87	trade (adj.)	báliwasin
88	trader	mámamaliwás
89	exchange (n.)	pálitan
90	exchange (adj.)	pálitin
91	barter (n.)	túwatan
92	barter (adj.)	túwayin
93	buy	bumilí
94	buyer	tagábilí
95	sell	magbilí, ipagbilí
96	seller	tagapágbilí
97	purchase (v.)	mamilí
98	purchaser	mámimili
99	merchandise (n.)	báligyain ( <i>baligyâ</i> , Bis.)
100	merchandise (1) (v.)	ibaligyâ, ipamaligyâ
101	merchandise (2) (v.)	mámaligyâ
102	merchandise, merchant	mambabaligyâ
103	investor	mámumuhunán
104	product	laláng, bunga
105	primary product	pángunahing laláng
106	productive	malálangin
107	productivity	pagkámalálangin
108	production	pangangalaláng
109	distribution	pamámahagi
110	consumption	pananaíd
111	consumer	mánanaíd
112	consumer goods	sairíng bilihin
113	capital	puhunan
114	capital-forming	mapagbuóng-puhunan
115	capital goods	pámuhunang bilihin, puhunang bilihin
116	finished goods	yaring bilihin
117	packaging	sabalot
118	repackaging	mulímbalot
119	assembly (econ.)	sabuô
120	reassembly	mulímbuô
121	free trade	malayang báliwasan
122	Bell Trade Act	Batás Bell sa Báliwasan

<b>123</b>	Magna Carta of Labor .....	Batayáng Kasulatán sa Paggawâ
<b>124</b>	minimum wage .....	kubdulang sahod
<b>125</b>	estimate (n.) .....	tantiyá
<b>126</b>	estimate (v.) .....	tantiyahín
<b>127</b>	value .....	halagá, halgá
<b>128</b>	valuation .....	paghahalagá
<b>129</b>	evaluation .....	paghahalgá
<b>130</b>	value .....	halagahán
<b>131</b>	evaluate .....	halgahán
<b>132</b>	valuator .....	tagáhalagá
<b>133</b>	evaluator .....	tagáhalgá
<b>134</b>	Philippine National Bank .....	Pambansáng Bángko ng Pilipinas
<b>135</b>	rural bank .....	pangkabukiráng bángko
<b>136</b>	Development Bank of the Philippines .....	Bángko sa Saunlád ng Pilipinas
<b>137</b>	central bank .....	lunduyang bángko
<b>138</b>	proprietor, owner .....	máy-ari
<b>139</b>	entrepreneur .....	maninikap
<b>140</b>	share of a partnership .....	bakas
<b>141</b>	partnership .....	bakasan
<b>142</b>	partner .....	kabakas
<b>143</b>	joint venture .....	sanibang sikap
<b>144</b>	company (commercial) .....	samahán, kumpanya (sa kalakal)
<b>145</b>	subsidiary company .....	kubsamahán
<b>146</b>	staff member of a commercial company ....	kasamá
<b>147</b>	corporation .....	sapián
<b>148</b>	share (of stock) .....	sapi, sosyo
<b>149</b>	shareholder in a corporation .....	kasapi
<b>150</b>	incorporated .....	isinásapián
<b>151</b>	inc. (abbr.) .....	isp. (dgt.)
<b>152</b>	president .....	pangulo
<b>153</b>	vice-president .....	pulí-pangulo
<b>154</b>	first vice-president .....	unang pulí-pangulo
<b>155</b>	second vice-president .....	ikalawáng pulí-pangulo
<b>156</b>	secretary .....	kalihim
<b>157</b>	secretariat .....	kálihimán
<b>158</b>	rapporteur .....	tagabuód
<b>159</b>	staff .....	kalupunán
<b>160</b>	file (of documents) .....	ligpít (ng mgá kasulatán)
<b>161</b>	file (v.) .....	iligpít, magligpít, ligpitín
<b>162</b>	folder .....	ipitán
<b>163</b>	file folder .....	ligpitan
<b>164</b>	fastener .....	pangabít
<b>165</b>	project .....	panukala, pabalak

<b>166</b>	project file .....	ligpít-panuklaan
<b>167</b>	follow-up file .....	ligpít-súbaybayan
<b>168</b>	office file .....	ligpít-tanggapan
<b>169</b>	general file .....	ligpít-lahatán
<b>170</b>	reading file .....	ligpít-basahán
<b>171</b>	special file .....	ligpít-tangi
<b>172</b>	NASSCO file .....	ligpít-NASSCO
<b>173</b>	filing cabinet .....	sálansanang-ligpít
<b>174</b>	advertisement .....	pamadyá
<b>175</b>	economic intelligence .....	pámalayáng ágimatin
<b>176</b>	monopoly .....	sarilakal ( <i>sarili + kalakal</i> )
<b>177</b>	oligopoly .....	untilakal ( <i>kaunti + kalakal</i> )
<b>178</b>	competition .....	tagisan, pakikitagís
<b>179</b>	competitor .....	katagis
<b>180</b>	competitive .....	matágisin
<b>181</b>	cooperation .....	túlungan, pakikitulong
<b>182</b>	technical cooperation .....	aghímuing túlungan
<b>183</b>	cooperative (adj.) .....	matutulungín
<b>184</b>	cooperative (n.) .....	tangkilikán
<b>185</b>	monopoly .....	saritangi
<b>186</b>	quotation (of price) .....	saturing
<b>187</b>	proposal .....	munakalà
<b>188</b>	offer .....	alók
<b>189</b>	bid (to sell) .....	salók ( <i>saling alók</i> )
<b>190</b>	bid (to purchase) .....	tampá
<b>191</b>	bidding .....	pásalukán
<b>192</b>	public bidding .....	pangmadláng pásalukán
<b>193</b>	open bidding .....	hayág na pásalukán
<b>194</b>	closed bidding .....	piníd na pásalukán
<b>195</b>	price, buying price .....	bilí
<b>196</b>	selling price .....	pagbibilí
<b>197</b>	free (free-of-charge) .....	awámbayad
<b>198</b>	cost .....	halagá (may kinalaman sa salapì)
<b>199</b>	production cost .....	halagáng lalangán
<b>200</b>	factory cost .....	halagáng págawaan
<b>201</b>	order (commercial) .....	pabilin
<b>202</b>	purchase order .....	pamíling pabilin
<b>203</b>	sales order .....	pamaligyáng pabilin
<b>204</b>	shipment time .....	taknáng-sakáy
<b>205</b>	delivery time .....	taknáng-hatíd
<b>206</b>	validity time .....	bisang-tión
<b>207</b>	date .....	taburáw ( <i>taón + buwán + araw</i> ), petsa

<b>208</b>	expiry .....	paglipas
<b>209</b>	expiry date .....	taburáw ng paglipas, petsa ng paglipas
<b>210</b>	award of contract .....	paggawad ng kásunduan
<b>211</b>	awardee .....	ginawaran
<b>212</b>	terms of payment .....	mgá tadhanà ng bayarán
<b>213</b>	terms of contract .....	mgá tadhanà ng kásunduan
<b>214</b>	cash (mode of payment) .....	káliwaan
<b>215</b>	cash (ready funds), cash-on-hand .....	salapíng hawak
<b>216</b>	installment .....	hulog
<b>217</b>	installment payment .....	hulugán
<b>218</b>	down payment .....	páuná, páunáng bayad
<b>219</b>	balance-of-payment .....	timbangang-bayad
<b>220</b>	deposit .....	lagak
<b>221</b>	earnest payment .....	patinga
<b>222</b>	deferred payment plan .....	inantalang bayarán
<b>223</b>	credit (gen. & abstract) .....	pantáw
<b>224</b>	debt .....	utang
<b>225</b>	loan .....	pautang
<b>226</b>	character loan .....	tiwalang pautang
<b>227</b>	interest (commercial) .....	tubò, patubò
<b>228</b>	interest loan .....	pátubuán
<b>229</b>	credit pool .....	páluwagan
<b>230</b>	credit union .....	kaisaháng pamantáw
<b>231</b>	discount .....	awas
<b>232</b>	bargain (v.) .....	tumawad
<b>233</b>	asset .....	áriin
<b>234</b>	liability .....	ságutin
<b>235</b>	obligation (econ.) .....	hárapin
<b>236</b>	credit .....	pantáw
<b>237</b>	letter of credit .....	kasulatáng pantáw
<b>238</b>	letter of guarantee .....	kasulatáng pantiyák
<b>239</b>	promissory note .....	kasulatáng pangakò
<b>240</b>	bond .....	panagót
<b>241</b>	bidder's bond .....	panagót-salók
<b>242</b>	performance bond .....	panagót-ganáp
<b>243</b>	exchange (currency) .....	pálitán (salapî)
<b>244</b>	foreign exchange .....	pálitang panlabás
<b>245</b>	patent .....	karapatáng-tuklás
<b>246</b>	economic policy .....	ágimating pátakarán
<b>247</b>	agricultural economics .....	sakahaning ágimatan
<b>248</b>	savings bank .....	simpanang bángko
<b>249</b>	savings .....	sinimpan
<b>250</b>	commercial bank .....	kalakalíng bángko

<b>251</b>	industrial bank .....	kalalangíng bángko
<b>252</b>	development bank .....	saunlaríng bángko
<b>253</b>	inventory .....	talátinggalan
<b>254</b>	conserve .....	tinggalín, itinggal
<b>255</b>	conservation .....	satinggal
<b>256</b>	capitalism .....	puhunanan
<b>257</b>	popular capitalism, universal capitalism .....	sampuhunanan
<b>258</b>	bourgeoisie .....	árian
<b>259</b>	bourgeois .....	árianin

## DALÚBBÁTASAN

(*Science of Law*)

1	science of law	dalúbbátasan
2	law	batás
3	bylaw	pátaakarámbatás
4	constitution	saligambatás
5	code	kabatasán
6	justice	katárungan
7	case	usapín
8	court	húkuman
9	judge	hukóm
10	accusation	paratang
11	to accuse	mágpangatang, paratangan
12	to be accused	maparatangan
13	the accused	ang pinaráratangan
14	the accuser	ang nagparatang
15	complaint	sumbóng
16	complainant	nagsúsumbóng
17	claim	habol
18	claimant	ang nagháhabol
19	cross-claim	habol-kapanig
20	counterclaim	gantíng-habol
21	quitclaim	bitíw-habol
22	action (steps taken)	hakbáng
23	legal action	hakbáng-pambatás
24	information (legal)	sakdál
25	arraignment	básansakdál
26	arraign	basáhansakdál
27	arraigned	binasáhansakdál
28	plaintiff	nagsásakdal
29	defendant	násasakdál
30	defense	pagtatanggól
31	respondent	pinanángót
32	accessory	kasapakát, kainalám
33	accomplice	kasabwát
34	connivance	sápakatan
35	conspiracy	sabwatan
36	counsel, lawyer, attorney	mánananggól
37	counselor-at-law	tagapayo-sa-batás, mánananggól

38	act (1) .....	gawâ
39	act (2) .....	batás
40	act of God .....	katalagahán ng Bathalà (Diyós)
41	damage .....	kapinsalaán, pinsalà
42	default .....	pagkukulang
43	fraud .....	dayà, pandarayà
44	felony .....	pagkakásala
45	crime .....	krimen
46	double jeopardy .....	makálawáng pagkásuóng
47	deed .....	kasulatán
48	testament .....	hulímbilin
49	inheritance .....	mana, mánahan
50	legacy .....	pamana
51	obligation (econ.) .....	hárapi
52	liability .....	ságutin
53	contract .....	kásunduan
54	terms of contract .....	mgá tadhanà ng kásunduan
55	terms of payment .....	mgá tadhanà ng bayarán
56	promissory note .....	kasulatáng pangakò
57	expiry date .....	taburaw ng paglipas, petsa ng paglipas
58	waiver .....	panalikod
59	void (adj.) .....	waláng bisà
60	void (v.) .....	pawaláng-bisà
61	breach .....	pagtatálusirâ
62	breach of contracy .....	tálusirâ sa kásunduan
63	breach of promise .....	tálusirâ sa pangakò
64	breach of peace .....	pangguguló
65	peace .....	kapayapaan
66	silence .....	katahimikan
67	order (of a community) .....	katiwasayán
68	security .....	kapanatagán
69	safety .....	kaligtasan
70	caution (n.) .....	paingat
71	caution (v.) .....	paingatan
72	warning .....	babalâ
73	warn (v.) .....	ipababalâ, babalaán
74	threat .....	balà
75	threaten .....	balaan
76	assault .....	pagsalakay, panlalabán
77	subversion .....	panlalabág
78	coercion .....	panggagahís
79	violence .....	karahasán
80	defamation .....	paninirang-puri (pasalitâ)

<b>81</b>	libel .....	paninirang-puri (pasulát)
<b>82</b>	duress .....	pamimilit
<b>83</b>	extortion .....	pangingikil
<b>84</b>	exploitation .....	panghuhuthot
<b>85</b>	intimidation .....	pananakot
<b>86</b>	deceit .....	panlilinláng
<b>87</b>	perjury .....	pagbubulaán
<b>88</b>	kidnaping .....	pagdukot
<b>89</b>	unjust vexation .....	dímakátarungang pangyayamót
<b>90</b>	usurpation .....	pang-aagaw
<b>91</b>	usury .....	labis na patubò
<b>92</b>	vagrancy .....	paghahampás-lupà
<b>93</b>	violation of domicile .....	paglabág sa tahanan
<b>94</b>	delinquent .....	dalinsíl
<b>95</b>	delinquency .....	kadalinsilán
<b>96</b>	juvenile delinquency .....	kadalinsilán ng kabataan
<b>97</b>	bandit .....	tulisán
<b>98</b>	moral turpitude .....	kaimbiháng-asal
<b>99</b>	adultery .....	pangangalunyã
<b>100</b>	concubinage .....	pakikiapíd
<b>101</b>	immorality .....	díkasanlingán, karumháng-asal
<b>102</b>	homicide .....	pagkápatáy
<b>103</b>	murder .....	pagpatáy
<b>104</b>	pleading .....	paglalahad
<b>105</b>	trial .....	paglilitis
<b>106</b>	venue .....	poók-sakdalan
<b>107</b>	bail .....	lagak-panagót
<b>108</b>	evidence .....	katibayan, patutoó
<b>109</b>	testimony .....	pananaksí, salaysáy ng saksi
<b>110</b>	witness .....	saksi
<b>111</b>	affidavit .....	sinumpaáng salaysáy
<b>112</b>	affiant .....	maysalaysáy
<b>113</b>	estoppel .....	hadláng
<b>114</b>	hearsay .....	sabi-sabi
<b>115</b>	incriminating question .....	tanóng na nagdadawit
<b>116</b>	mitigating circumstances .....	mgá kapangyayaring nagpapagaán
<b>117</b>	aggravating circumstances .....	mgá kapangyayaring nagpapabigát
<b>118</b>	alias .....	alyás
<b>119</b>	adverse party .....	kausapín
<b>120</b>	age of consent .....	gulang ng pagpayag
<b>121</b>	citizen .....	mámamayán
<b>122</b>	citizenship .....	pagkámamayán

<b>123</b>	naturalized citizen .....	isinamámamayán, sinakatutubong mámamaya- yán
<b>124</b>	natural-born citizen .....	mámamayang likás, katutubong mámamaya- yán
<b>125</b>	naturalization .....	pagsasamámamayán, sakatutubò
<b>126</b>	representative .....	kinatawán
<b>127</b>	representation .....	pagkatawán
<b>128</b>	power of attorney .....	kapangyarihan ng kinatawán
<b>129</b>	agent (concrete) .....	kinagawâ
<b>130</b>	agency (concrete) .....	kágawaán
<b>131</b>	expressed agency .....	kágawaáng hayág
<b>132</b>	implied agency .....	kágawaáng hiwatíg
<b>133</b>	admission .....	pag-amin
<b>134</b>	adoption (1) (of resolutions) .....	pagpapatibay
<b>135</b>	adoption (2) (of children) .....	pag-ampón, pag-aampón
<b>136</b>	due process of law .....	tumpák na saayos ng batás
<b>137</b>	admiralty law .....	batás-pandagat
<b>138</b>	leave of court .....	pahintulot ng húkuman
<b>139</b>	contempt of court .....	pagsuwáy sa húkuman, paglapastangan sa húkuman
<b>140</b>	warrant .....	utos
<b>141</b>	search warrant .....	utos sa paghalughóg
<b>142</b>	arrest warrant .....	utos sa pagdakíp
<b>143</b>	writ of injunction .....	utos sa pagpigil
<b>144</b>	conveyancing .....	paglilipat (ng arí-arian)
<b>145</b>	decision .....	pasiyá, hatol
<b>146</b>	dismissal .....	pawalánsaysáy
<b>147</b>	acquittal .....	pawalánsala
<b>148</b>	conviction .....	hátulsala
<b>149</b>	convict (n.) .....	salarín
<b>150</b>	convict (v.) .....	hatúlansala
<b>151</b>	arrest (n.) .....	pagdakíp
<b>152</b>	arrest (v.) .....	dakpín
<b>153</b>	appeal (n.) (legal) .....	paghahaból
<b>154</b>	appeal (v.) .....	maghaból
<b>155</b>	uphold .....	katigan
<b>156</b>	reverse (v.) .....	tumbalikín
<b>157</b>	penalty .....	parusa, kaparusahán
<b>158</b>	jail .....	pītan
<b>159</b>	jailed .....	nápiit
<b>160</b>	imprisonment .....	pagkábilanggô
<b>161</b>	capital punishment .....	parusang kamatayan
<b>162</b>	military intelligence .....	pámalayang hukbuhin

<b>163</b>	Court of Industrial Relations .....	Húkuman ng Kalalangíng Pagsasamahán
<b>164</b>	Justice of the Peace Court .....	Húkumang Pamayapà
<b>165</b>	Court of First Instance .....	Húkuman ng Unang Dúlugan
<b>166</b>	Court of Appeals .....	Húkuman sa Paghahaból
<b>167</b>	Supreme Court .....	Kátaas-taasang Húkuman
<b>168</b>	World Court .....	Húkumang Pandaigdíg
<b>169</b>	Civil Code .....	Bayanhíng Kabatasán
<b>170</b>	Revised Penal Code .....	Binagong Pamparusang Kabatasán
<b>171</b>	Anti-Subversion Law .....	Batás Laban sa Panlalabág
<b>172</b>	Investments Incentive Law .....	Batás sa Udyók-Pamumuhunan
<b>173</b>	Industrial Peace Act .....	Batás sa Káalangíng Kapayapaan
<b>174</b>	Agrarian Reform Law .....	Batás sa Sakahaning Mulinyô

## DALÚBBANWAHAN

(Political Science)

1	political science .....	dalúbbanwahan
2	political scientist .....	dalúbbanwá
3	politician .....	pulítikó
4	politics .....	pulítiká
5	sociopolitical .....	ulnubanwahan
6	political education .....	katuruáng pampulítiká
7	nation .....	bansâ
8	state (n.) (pol. org.) .....	banwá
9	national (n.) .....	taumbansâ
10	national (adj.) .....	pambansâ, bansain
11	town people .....	taumbayan
12	inhabitant, resident .....	mananahanan
13	outlaw .....	taunlabás
14	mountain people .....	taumbundók
15	nationalization .....	sabansâ
16	nationalize .....	sabansaín
17	nationality .....	katauhambansâ
18	United Nations .....	Nangágkakaisáng Bansâ
19	United States of America .....	Nangágkakaisáng Banwá ng Amérika
20	sovereign (n.) .....	higpunò ( <i>higít sa punò</i> )
21	sovereign state .....	higpunong banwá
22	sovereign power .....	higpunong lakás
23	sovereignty .....	kahigpunuan
24	control .....	supil
25	foreign control .....	banyagang supil
26	decontrol .....	hisupil
27	grant-in-aid .....	gawad-tulong
28	statesmanship .....	palábanwahan
29	statesman .....	palábanwá
30	diplomacy .....	palátalastasan
31	diplomat .....	palátalastás
32	diplomatic .....	palátalastasin
33	diplomatic relations .....	palátalastasing ugnayan
34	land .....	lupà
35	territory .....	lupaín
36	territorial .....	lupainín
37	territorial rights .....	lupainíng karapatán

38	territorial limits	lupainíng katakdaán
39	territorial waters	lupainíng dagatan
40	territoriality	kalupainín
41	military base	hukbuhing takad
42	concentration	pámimisan
43	government	pámahalaán
44	civil (adj.)	bayanhín
45	civil government	bayanhíng pámahalaán
46	military (adj.)	hukbuhin
47	military government	hukbuhing pámahalaán
48	hierarchy	halpunan ( <i>halayháy + punó + -an</i> )
49	secular	banwahanin
50	clerical (religious)	simbahanin
51	propaganda	paniniwalat (pangsisiwalat)
52	status quo	kairalan
53	reform (n.)	mulinyô
54	reform (v.)	mulinyuín
55	reformation	samulinyô
56	reformer	tagámulinyô
57	civil service	lingkurang bayanhín
58	employee	kawaní
59	civil service employee	kawaníng bayanhín
60	civil service eligible	nakasulit sa lingkurang bayanhín
61	military service	hukbuhing lingkód
62	tactic, tactics	paagi (Bis.)
63	strategy	patigayon (Bis.)
64	civic (adj.)	pambayan
65	civics (br. of pol. sc.)	palámayanán
66	civilian	táumbayan
67	public (n.)	madlâ
68	public (adj.)	madlain, pangmadlâ
69	public opinion	madlaing kurukurò
70	military (n.)	taunghukbó
71	militarist	makáhukbó
72	citizen	mámamayán
73	citizenship	pagkámamayán
74	natural-born citizen	mámamayáng likás
75	naturalized citizen	isinamámamayán, sinakatutubong mámama- yán
76	naturalization	pagsásamámamayán, sakatutubò
77	socialism	ulnungkurò, sosyalismo
78	socialist	ulnungkumurò, sosyalista
79	socialist state	sosyalistang banwá

<b>80</b>	oligarchy .....	untipunuan ( <i>kaunti + punò + -an</i> )
<b>81</b>	oligarch .....	untipunò
<b>82</b>	ideology .....	palákuruán
<b>83</b>	ideological .....	palákuruanín, pampalákuruán
<b>84</b>	ideologist .....	palákurò, mangungurò
<b>85</b>	parity .....	pantayan
<b>86</b>	individualism .....	pagkámakásarili
<b>87</b>	feudalism .....	pagkámaláalipin
<b>88</b>	feudal .....	maláalipin
<b>89</b>	slavish dependence .....	maláaliping salig pamumulupot
<b>90</b>	meeting .....	pulong
<b>91</b>	participant in a meeting .....	kapulong
<b>92</b>	assembly, convention .....	kapulungán
<b>93</b>	the body (in a meeting, assembly or convention) .....	kapulungan
<b>94</b>	plenary session .....	pulong ng buóng kapulungan
<b>95</b>	group session .....	pulong ng lipon, pulong ng larang
<b>96</b>	unit of organization .....	tatag
<b>97</b>	organize (v.) .....	magtatag
<b>98</b>	organization (1) .....	katatagan
<b>99</b>	organization (2) .....	pagtatatag, satatag
<b>100</b>	reorganization .....	mulíntatag
<b>101</b>	member (of any org. in general) .....	kapisan
<b>102</b>	collection (of people or things) .....	katipunan
<b>103</b>	member of a <i>katipunan</i> .....	katipon
<b>104</b>	co-founder, charter member .....	katatag
<b>105</b>	institution (establishment) .....	tátagin
<b>106</b>	institution (established practice, etc.) .....	gáwiin
<b>107</b>	institution (act of instituting) .....	satatag
<b>108</b>	section .....	pangkát
<b>109</b>	co-member of a section .....	kapangkát
<b>110</b>	group .....	lipon
<b>111</b>	co-member of a group .....	kalipon
<b>112</b>	committee .....	lupon
<b>113</b>	co-member of a committee .....	kalupon
<b>114</b>	subcommittee .....	kublupon
<b>115</b>	co-member of a subcommittee .....	kakublupon
<b>116</b>	steering committee .....	hinlulupon
<b>117</b>	association .....	kapisanan
<b>118</b>	member of an association .....	kaanib
<b>119</b>	union (usually of workers) .....	kaisahán, unyón
<b>120</b>	co-member of a union, unionist .....	kaisá, kaunyón

121	federation (of organizations) .....	kalipunán
122	proprietor, owner .....	may-arì
123	entrepreneur .....	máninikap
124	share of a partnership .....	bakas
125	partnership .....	bakasán
126	partner .....	kabakas
127	joint venture .....	sánibang sikap
128	company (commercial) .....	samahán, kumpanyá (sa kalakal)
129	subsidiary company .....	kubsamahán
130	staff member of a com. company .....	kasamá
131	corporation .....	sapián
132	share (of stock) .....	sapì, sosyo
133	shareholder of a corporation .....	kasapì
134	incorporated .....	isinásapián
135	inc.(abbr.) .....	isp. (dgt.)
136	ex-officio .....	sabilin ( <i>sa bisà ng tungkulin</i> )
137	ex-officio member .....	sabiling kaanib
138	chairman .....	tagápangulo
139	co-chairman .....	kangulo ( <i>kasamang tagápangulo</i> )
140	sub-chairman .....	kubngulo ( <i>kub + tagápangulo</i> )
141	ex-officio chairman .....	sabiling tagápangulo
142	official (n.) .....	pinunò
143	official (adj.) .....	tungkulanin
144	official use .....	tungkulaning paggamit
145	For Official Use Only .....	Tungkulaning Gamit Lamang
146	official seal .....	tungkulaning taták
147	official duty .....	tungkulaning gáwain
148	recall .....	pagpapabalík
149	referendum .....	pagtutukoy
150	country (as opposed to the town or city) .....	labásbayan, kabukirán
151	country .....	bayan
152	countryman .....	kababayan
153	the people .....	sambayanán
154	the individual .....	sarilintao
155	chief .....	punò
156	head chief .....	himpupunò
157	leader (1) .....	pamuno
158	leader (2) (ward leader in politics) .....	lider
159	caucus .....	kokus
160	quorum .....	kasapatán
161	point or item of business .....	tikmâ
162	agenda .....	tikmaan
163	minutes (of a meeting) .....	katitikan

<b>164</b>	suggestion .....	palagáy
<b>165</b>	advice .....	payo
<b>166</b>	recommendation .....	tagubilin
<b>167</b>	instruction (rule) .....	panuto
<b>168</b>	suggest (v.) .....	magpalagáy, magpasok ng palagáy
<b>169</b>	motion .....	mungkahì
<b>170</b>	put into motion .....	isamungkahì
<b>171</b>	make a motion, move .....	magmungkahì
<b>172</b>	second a motion .....	pangalawahán ang isáng mungkahì
<b>173</b>	oppose a motion .....	tutulan ang isáng mungkahì
<b>174</b>	approve a motion .....	pagtibayin ang isáng mungkahì
<b>175</b>	reject a motion .....	dípagtibayin ang isáng mungkahì
<b>176</b>	shelve a motion .....	isantabí ang isáng mungkahì
<b>177</b>	table a motion .....	isalapág ang isáng mungkahì
<b>178</b>	accept a motion .....	tanggapín ang isáng mungkahì
<b>179</b>	point of order .....	katumpakán ng tikmâ
<b>180</b>	out of order .....	walâ sa tikmâ
<b>181</b>	refer to a committee .....	itukoy sa isáng lupon
<b>182</b>	point of information .....	tikmâ ng pabatíd
<b>183</b>	endorse to a committee .....	ilipat sa isáng lupon
<b>184</b>	endorsement .....	paglilipat
<b>185</b>	vote (in a division of the house) .....	boto
<b>186</b>	put to a vote .....	isaboto, isabotohán
<b>187</b>	election .....	halalan
<b>188</b>	vote (in an election) .....	halál
<b>189</b>	ballot .....	balota
<b>190</b>	amendment .....	susog
<b>191</b>	hold a meeting .....	magpulong
<b>192</b>	call a meeting to order .....	simulán ang pulong
<b>193</b>	adjourn a meeting .....	itindíg ang pulong
<b>194</b>	registration .....	pagsasatalâ, satalâ
<b>195</b>	registered .....	isinalatâ
<b>196</b>	candidate .....	halangád ( <i>hangád</i> ), kandidato
<b>197</b>	candidate for president .....	halangád sa pangulo
<b>198</b>	candidate for the presidency .....	halangád sa pagká pangulo
<b>199</b>	nomination .....	sangalan
<b>200</b>	nominate .....	isangalan, sangalanin
<b>201</b>	nominated .....	isinangalan
<b>202</b>	nominee .....	ngálanin
<b>203</b>	resolution .....	kapasyahán
<b>204</b>	adoption (of a resolution) .....	pagpapatibay
<b>205</b>	policy .....	pátaskarán

<b>206</b>	basis .....	batayán
<b>207</b>	practice .....	palakad
<b>208</b>	application (utilization) .....	salapat
<b>209</b>	rule .....	tuntunin
<b>210</b>	guide rules .....	tuntuning patnubay
<b>211</b>	rules and policies .....	mgá tuntunin at pátakarán
<b>212</b>	regulation .....	alituntunin
<b>213</b>	rules and regulations .....	mgá tuntunin at alituntunin
<b>214</b>	law .....	batás
<b>215</b>	bylaw .....	pátakarámbatás
<b>216</b>	constitution .....	sáligambatás
<b>217</b>	articles of incorporation .....	mgá batayán sa pagsasapián
<b>218</b>	charter (of an organization) .....	batayang kasulatán
<b>219</b>	presidential system .....	pampánguluháng kaayusán
<b>220</b>	parliamentary system .....	pambátasang kaayusán
<b>221</b>	parliament .....	batasan

## PÁNULATAN

(Writing)

1	writing (1) .....	pánulatan
2	writing (2) .....	sulatin
3	journalism .....	pámahayagán
4	written matter .....	sulat
5	letter .....	liham
6	letterhead .....	ulunliham
7	address .....	pádalahan
8	correspondence .....	pálihamán
9	book .....	aklát
10	booklet, brochure, pamphlet .....	muntaklát ( <i>muntíng aklát</i> )
11	leaflet .....	miklát ( <i>mikmík na aklát</i> )
12	hard cover book .....	daklát ( <i>dakúng aklát</i> )
13	volume .....	buók (Bis.)
14	reference book .....	sangguniáng aklát
15	guide book .....	patnubayang aklát
16	hand book .....	dalaklát ( <i>daláhing aklát</i> )
17	manual .....	hawaklát ( <i>háwaking aklát</i> )
18	textbook .....	araláng aklát
19	school book .....	pampáaraláng aklát
20	library book .....	pang-aklátang aklát
21	workbook .....	gawaang aklát
22	instruction book .....	pánutuháng aklát
23	home reading book .....	bahaybásahing aklát
24	outside reading book .....	labásbásahing aklát
25	supplementary reading book .....	dagdágbásahing aklát
26	reader .....	básahan
27	dictionary .....	talátinigan
28	vocabulary (1) (book or list) .....	talásálitaan
29	vocabulary (2) (abstract) .....	sansálitaan
30	glossary .....	taláhuluganan
31	cyclopedia .....	taláalaman
32	encyclopedia .....	santaláalaman
33	directory .....	taláhanapán
34	bibliography .....	taláaklátan
35	reference list .....	talásanggunián
36	thesaurus .....	talásimpanan
37	library .....	(silíd-)aklátan

38	reading room .....	silíd-basahán
39	bookstore, bookshop .....	tindahang-aklát, bílihang-aklát
40	book cover .....	pabalát ng aklát
41	hard cover .....	matigás na pabalát
42	soft cover, paper back .....	papél na pabalát
43	book jacket .....	balot-aklát
44	review (a book) .....	balisulyapán (ang isáng aklát)
45	book review .....	balisulyáp-aklát
46	draft (preliminary version of written work) .....	waki (NSL)
47	outline .....	balangkás
48	proof (printing) .....	balibásahan
49	proofreading .....	balibasa
50	proofread (v.) .....	balibasahín
51	proofreader .....	tagábalibasa
52	print (n.) .....	limbag
53	print (v.) .....	limbagín
54	printing press .....	limbagan
55	printing house .....	pálimbagan
56	printer (press operator) .....	manlilimbág, tagálimbág
57	printer (businessman) .....	tagapáglimbág, tagapágpalimbág
58	publisher .....	tagapáglathalà
59	slug (line of type) .....	hantík ( <i>hanay ng titik</i> )
60	linotype (machine) .....	hantikan
61	linotypist .....	mánghahantík
62	platen printing press .....	lapyálimbagan
63	rotary printing press .....	alúlimbagan
64	offset printing press .....	sálinlimbagan
65	stenography .....	iklilat ( <i>maiklíl ng sulat</i> )
66	stenographer .....	máng-iiklilat
67	typewritten matter, typescript .....	limbít ( <i>limbág na maliliít</i> )
68	typewriter (machine) .....	limbitan
69	typewrite (v.) .....	limbitín, lumimbít, maglimbít
70	typist .....	mánlilimbít
71	typewriting (study or art) .....	palálimbitan
72	typing .....	paglilimbít, panlilimbít
73	stenotyping .....	iklilimbít, pag-iiklilimbít, paniniklilimbít
74	stenotypist .....	máng-iiklilimbít
75	typewriter paper .....	papél-limbitan
76	mimeograph machine .....	limwaran ( <i>limbág-húwaran</i> )
77	mimeography .....	palálimwaran
78	mimeograph, mimeographed matter .....	limwád, nilimwád
79	mimeograph (v.) .....	limwarín, maglimwád
80	mimeograph operator .....	mánlilimwád

81	stencil	pánlimwád, papél panlimwád
82	inkwell	dinsulan
83	layout (of printed matter)	talatag (ng limbaging babasahín)
84	picture	larawan
85	illustration	palarawan, larawang-guhit
86	illustrate	ipálarawan
87	expression	pahayag
88	express	ipahayag, magpahayag
89	exposed, divulged	hayág
90	expose, divulge	ihayag
91	narration	saysáy, pagsasaysáy
92	detailed narration	salaysáy, pagsasalaysáy
93	narrate (1)	isaysáy, ilahád
94	narrate (2)	isalaysáy
95	interpret (ling.)	iliwat, magliwat
96	interpretation (ling.)	liwat, pagliliwat
97	interpreter (ling.)	tagáliwat
98	interpret (gen. meaning)	pakáhuluganán, magpakáhulugán
99	interpretation (gen. meaning)	pakáhulugán
100	interpreter (gen. meaning)	tagapaǵpakáhulugán
101	criticize	punahín
102	critic	mámumuná
103	literary criticism	pamumunáng pámpanitikán
104	censure (n.)	pulà
105	censure (v.)	pulaan
106	censured	pinulaan
107	censor (n.)	tagápulà
108	censored	napulà
109	ban (n.)	kabawalán, sahát
110	ban (v.)	ipágbawal, ipasahát
111	banned	ipinágbawal, bawal, sahát
112	leaf	dahon
113	flyleaf	palípdahon ( <i>palipád-dahon</i> )
114	title	pamagát
115	page	páhiná, mukhâ
116	title page	pamagát-dahon
117	copyright	karapatáng-akdá
118	acknowledgment	pagkilala
119	table of contents	találamanan
120	foreword	bungadsabi
121	preface	pambungad
122	introduction	páunang salitâ

<b>123</b>	text .....	lamándiwà
<b>124</b>	context .....	kalamnán
<b>125</b>	paragraph .....	tálataán
<b>126</b>	line of prose, line of print .....	talatà
<b>127</b>	chapter .....	kabanatà
<b>128</b>	appendix .....	hugpóng
<b>129</b>	index .....	taláturuán
<b>130</b>	continuation .....	karugtóng
<b>131</b>	sequel .....	kasumunód
<b>132</b>	copy .....	sipì
<b>133</b>	original copy .....	mulsipì ( <i>múlaang sipì</i> )
<b>134</b>	carbon copy .....	siping karbón
<b>135</b>	carbon paper .....	papél karbón
<b>136</b>	duplicator, copying machine .....	panipì
<b>137</b>	duplicate .....	duhasipì
<b>138</b>	triplicate .....	tatsipì
<b>139</b>	quadruplicate .....	patsipì
<b>140</b>	quintuplicate .....	limsipì
<b>141</b>	reprint (n.) .....	mulimbág ( <i>mulíng limbág</i> )
<b>142</b>	reprint (v.) .....	mulimbagín
<b>143</b>	revision .....	mulinyós ( <i>mulíng ayos</i> )
<b>144</b>	revise (v.) .....	mulinyusin
<b>145</b>	issue (n.) .....	labás
<b>146</b>	issue (v.) .....	ilabás, palabasín
<b>147</b>	reissue (n.) .....	mulinlabás
<b>148</b>	reissue (v.) .....	imulinlabás
<b>149</b>	edition .....	hipnô (NSL)
<b>150</b>	revised edition .....	hipnóng minulinyós
<b>151</b>	edit (v.) .....	hipnuín
<b>152</b>	editor .....	mánghihipnô, patnugot, editór
<b>153</b>	script .....	sulatsáy ( <i>sulat-salaysáy</i> )
<b>154</b>	writer .....	mánunulát
<b>155</b>	scriptwriter .....	mánunulatsáy
<b>156</b>	author .....	sumulat, kumathâ, may-akdâ
<b>157</b>	literature .....	pánitikán
<b>158</b>	essay .....	sanaysáy
<b>159</b>	formal .....	maanyô
<b>160</b>	informal .....	dímaanyô
<b>161</b>	familiar (in lit.) .....	mahilwáy (Bis.)
<b>162</b>	formal essay .....	maanyóng sanaysáy
<b>163</b>	familiar essay .....	mahilwáy na sanaysáy
<b>164</b>	article .....	lathalaín, artíkulo
<b>165</b>	short story .....	maiklínng kathâ, maiklínng kuwento

166	tale .....	kuwento
167	novel .....	kathámbuhay, nubela, nobela
168	fiction .....	kathâ
169	science writing .....	sulatíng-aghám
170	science fiction .....	katháng-aghám
171	biography .....	talambuhay
172	autobiography .....	saribuhay
173	poem .....	tulâ
174	poetry .....	panulaan
175	basis of classification of poems .....	batayán ng paláurián ng mgá tulâ
176	form .....	anyô
177	narrative poem .....	salaysaying tulâ
178	dramatic poem .....	maduláng tulâ
179	lyric poem .....	áwiting tulâ, dalít
180	dramatic lyric poem .....	maduláng dalít, dalítdulâ
181	joustic poem .....	patnigang tulâ
182	structure (of poem) .....	kayarián (ng tulâ)
183	line of verse of poetry .....	taludtód
184	stanza .....	táludturán, sagnóng
185	verse .....	táludturán, tugmaan
186	versifying .....	táludturín
187	free verse .....	maláyang táludturán
188	blank verse .....	dítugmáng táludturán
189	meter (in poetry) .....	sukat
190	rhyme .....	tugmâ
191	meter-rhymed verse .....	máysukat-máytugmáng táludturán
192	prose .....	túluyan
193	poetry in prose .....	tulâ sa túluyan
194	prose poem .....	túluyang tulâ
195	object .....	layon
196	descriptive .....	mapáglarawan, lárawanín
197	didactic .....	mapághanuto
198	amusive .....	mapánlibáng
199	satirical .....	mapáng-uróy
200	sarcastic .....	mapanuyâ
201	ironical .....	mapánlibák
202	symbolic .....	masagisag
203	imaginistic .....	malaragwáy
204	realistic .....	makátunay, makátutoó
205	realism .....	pagkámakátunay
206	surrealistic .....	makákubtunay
207	surrealism .....	pagkámakákubtunay

208	method	pamamaraán
209	effect	bisà
210	emotional	maramdamin
211	reflective	mabulaybulay
212	occasion	pagkakátaón
213	casual, occasional	pampagkakátaón
214	heavy	mabigát
215	light	magaán
216	epic	darangan (Mar.)
217	epic story	kuwentong darangan
218	epic poem	tuláng darangan
219	primitive epic poem	baruwáng na tuláng darangan
220	artistic epic poem	masining na tuláng darangan
221	mock epic poem	mapańg-uyám na tuláng darangan
222	metrical romance	awit
223	ballad	tulamát ( <i>tuláng alamát</i> )
224	popular ballad	palasák na tulamát
225	literary ballad	pampánitikáng tulamát
226	comedy	katawanán
227	tragedy	kalunusán
228	dramatic comedy in poetry	maduláng katawanán sa tulâ
229	dramatic tragedy in poetry	maduláng kalunusán sa tulâ
230	dramatic tragicomedy in poetry	maduláng lunús-katawanán sa tulâ
231	tragicomedy	lunús-katawanán
232	monologue	sariusap
233	dialog	dalwausap
234	dramatic monologue in poetry	maduláng sariusap sa tulâ
235	melody	himig
236	melodrama	himigdulâ
237	melodramatic	mahimigdulâ
238	melodrama in poetry	himigdulâ sa tulâ
239	farce	tiyáw (NSL)
240	farce in poetry	tiyáw sa tulâ
241	farcical	matiyáw
242	ridicule (n. & v.)	kantiyáw, kantiyawán
243	ode	dalít-puri
244	elegy	dalítlumbáy
245	pastoral	dalítbukid
246	psalm	dalítbanál
247	hymn	dalítsambá, santinig
248	love song	dalítsuyò
249	sonnet	dalítlit ( <i>dalít</i> na maliít)
250	couplet	dulay

251	lyric couplet .....	dalítdulay
252	rondel .....	dalíthunig
253	simple lyric poem .....	dalítpayák (90% ng ating mgá tulâ)
254	maxim .....	pananabi
255	adage .....	sábihin
256	precept .....	sáwikaín
257	idiom .....	káwikaán
258	idiomatic .....	káwikaanin
259	proverb .....	saláwikaín
260	saying .....	sabi
261	motto .....	kásabihán
262	slogan .....	pamanság
263	concept .....	dalumat
264	conception .....	kadalumatan
265	conception (act of forming concepts) .....	pagdalumat
266	slang .....	balbál
267	provincialism .....	lalawiganin
268	illusion, poetic imagination .....	harayà
269	plot .....	bangháy, kabanghayán
270	background .....	sanligan
271	impression .....	kakintalán
272	unity of effect .....	kaisahán ng bisà
273	characterization .....	kapanauhan, paglalarawang-tauhán
274	motivation (1) .....	kaganyakán
275	motivation (2) .....	saganyák
276	peculiarity .....	kakanyahán
277	theme .....	paksándiwà
278	color (lit.) .....	kakulayan
279	emotional reaction .....	sagimsím
280	inspiration .....	sigyá, sigliwà
281	fairy tale .....	kuwentong bibít
282	method of poetic construction .....	pamamaraán ng sayarì ng tulâ
283	extraction (lit.) .....	paghahaláw
284	grouping .....	paglilipon
285	description .....	paglalarawan
286	elements (essence) of poetry .....	mgá salík ng tulâ
287	theme and essence .....	paksándiwà at salík
288	poetic diction .....	matúlaing katinigan
289	poetic syntax .....	matúlaing saugnáy
290	mores .....	malig
291	spirit (psy.) .....	lagyô
292	spirit (lit.) .....	diwà

<b>293</b>	atmosphere (lit.) .....	kaligirán
<b>294</b>	environment .....	kaligirán
<b>295</b>	comprehension .....	katalusán
<b>296</b>	meditation (stream of consciousness) .....	salining
<b>297</b>	retrospection .....	pagninilay-nilay, panilay
<b>298</b>	legend .....	alamát
<b>299</b>	legendry .....	álamatan
<b>300</b>	legendary .....	maalamát
<b>301</b>	figure of speech .....	tayutay, anyúndiwà, larawang-diwà
<b>302</b>	comparison .....	hambíng
<b>303</b>	simile .....	hawig
<b>304</b>	analogy .....	wangkí
<b>305</b>	metaphor .....	wangis
<b>306</b>	personification, prosopopoeia .....	sadiwantao
<b>307</b>	transferred epithet .....	saurintao
<b>308</b>	allegory .....	talinhagà
<b>309</b>	parable .....	sayaral ( <i>salaysáy</i> na pangaral), parabula
<b>310</b>	fable .....	sayguní ( <i>salaysáy</i> na maguní- <i>guní</i> ), pabula
<b>311</b>	antonomasia .....	banság
<b>312</b>	kenning .....	saalam
<b>313</b>	metonymy .....	halíturing ( <i>halíp</i> + <i>turing</i> )
<b>314</b>	synecdoche .....	halísakop ( <i>halíp</i> + <i>sakop</i> )
<b>315</b>	hyperbole .....	sawig (NSL)
<b>316</b>	exclamation .....	bulalás
<b>317</b>	rhetorical question .....	panagusay
<b>318</b>	pleonasm .....	panigib
<b>319</b>	euphemism .....	pahiman
<b>320</b>	apostrophe .....	panawagan
<b>321</b>	climax .....	sukdól
<b>322</b>	anticlimax .....	gantínsukdól
<b>323</b>	parison .....	paritimbáng
<b>324</b>	epistrophe .....	pandulo
<b>325</b>	epexegesis .....	salisaysáy ( <i>masalimuot</i> na <i>salaysáy</i> )
<b>326</b>	anaphora .....	saulit
<b>327</b>	alliteration .....	saulinig
<b>328</b>	onomatopoeia .....	sintunóg
<b>329</b>	paronomasia .....	paritugmâ
<b>330</b>	assonance .....	parihunig
<b>331</b>	antistrophe .....	pamalikíd ( <i>balikíd</i> , Bis. – recall)
<b>332</b>	anadiplosia .....	ugnáy-ulit
<b>333</b>	anastrophe .....	kabaligtarán
<b>334</b>	geminatio .....	sakambál
<b>335</b>	tnesis .....	salingit

<b>336</b>	oxymoron .....	kulanglabis
<b>337</b>	litotes .....	makumbabâ
<b>338</b>	asyndeton .....	lakdáw
<b>339</b>	polysyndeton .....	damiugnáy
<b>340</b>	metabasis .....	lipat
<b>341</b>	irony .....	libák
<b>342</b>	sarcasm .....	tuyâ
<b>343</b>	mockery .....	uyám
<b>344</b>	parody .....	gáyambalbál
<b>345</b>	mimesis .....	gagád
<b>346</b>	equivoke .....	alanganin
<b>347</b>	paradox .....	balighô
<b>348</b>	thesis .....	tikhâ, katikhaán
<b>349</b>	antithesis .....	gantíntikhâ
<b>350</b>	aposiopesis .....	untól (PSL)
<b>351</b>	apophasis .....	pakunwarí
<b>352</b>	antistrophon .....	gantímatwíd
<b>353</b>	prolepsis .....	pangunguna
<b>354</b>	paromology .....	parayâ
<b>355</b>	anacoenosis .....	hikurò
<b>356</b>	epigram .....	tugmatiyáw
<b>357</b>	riddle .....	bugtóng
<b>358</b>	conundrum .....	paisip
<b>359</b>	enigma .....	hibat
<b>360</b>	epilogue .....	pamuód

## DALÚBWÍKAAN

(Linguistics)

1	language .....	wikà
2	science of language .....	aghám-wikà
3	philology .....	paláwíkaan
4	philologist .....	paláwikà
5	philological .....	paláwíkain
6	linguistics .....	dalúbwíkaan
7	linguist .....	dalúbwikà
8	linguistic (adj.) .....	dalúbwíkain
9	general linguistics .....	lahatáng dalúbwíkaan
10	descriptive linguistics .....	lárawaníng dalúbwíkaan
11	structural linguistics .....	yáriing dalúbwíkaan
12	comparative philology .....	hambingíng paláwíkaan
13	semantics, semasiology .....	paláhuluganan
14	general semantics .....	lahatáng paláhuluganan
15	grammar .....	balarilà
16	historical grammar .....	makásaysaying balarilà
17	graphonomy .....	palásulatán
18	glottochronology .....	paládilatakaan
19	etymology .....	palámuhatan, pánuysuyán
20	folk etymology .....	palámuhatáng-bayan
21	voice (speech sound) .....	tinig
22	accent .....	díin
23	stress .....	lundô
24	pitch .....	tinís
25	intonation .....	puntó
26	phonology .....	(dalúb) tínigan
27	phoneme .....	multinig ( <i>múlaang tinig</i> )
28	phonemic .....	multínigin
29	phonemic notation .....	multíniging halat
30	phonemic analysis .....	multíniging suri
31	morpheme .....	multuran ( <i>múlaang katuringán</i> )
32	morphemic .....	multuranin
33	morphophonemics .....	multurinigan
34	morphophonemic (adj.) .....	multurinigin
35	phonetics .....	palátínigan
36	phonetic spelling .....	palátíniging baybáy
37	phonetic alphabet .....	palátíniging abakada

38	phoneticity	pagkátínigin
39	phonics	sánaytínigan
40	morphemics	multuranan
41	phonemics	multínigan
42	morphology	palátúringan
43	syntax	paláugnayan
44	syntactical	paláugnayin
45	syntactical relation	paláugnaying kaugnayán
46	pronounce (v.)	bigkasín
47	pronunciation	bigkás
48	inflection	sabayló
49	declension	saukol
50	conjugation	pagbabangháy, sabangháy
51	interpretation (ling.)	liwat, pagliliwat, saliwat
52	interpret (ling.)	liwat, magliwat
53	interpreter (ling.)	tagáliwat
54	translation	salin, hulog
55	translate	isalin, magsalin, ihulog, maghulog
56	translator	tagásalin, tagáhulog
57	expression	pahayag
58	express	ipahayag, magpahayag
59	dictionary	talátínigan
60	vocabulary (1) (book or list)	talásálitaan (aklát o tálaan)
61	vocabulary (2) (abstract)	sansálitaan
62	glossary	taláhuluganan
63	mark	gurlít
64	word formation	palábuuán
65	derivation	paghugot
66	coinage	paglikhâ
67	idiom	kawikaán
68	idiolect	sariwikà
69	idiolectology	palásariwíkaan
70	dialect	wíkain
71	dialectology	paláwíkainan
72	meaning	kahulugán
73	arbitrariness	alitakdâ
74	arbitrary	alitakdain
75	arbitrary word	alitakdaing salitâ
76	name	ngalan, pangalan
77	nomenclature	kangalanán
78	term	tawag
79	terminology	katawagán
80	consistently interrelated	maúgnayin

81	consistently interrelated term .....	maúgnaying katawagán
82	root-word .....	salitáng-ugát
83	word-base .....	salitáng-takad
84	derived word .....	salitáng hinugot
85	coined word .....	salitáng nilikhâ
86	combining form .....	panambál
87	affix .....	panlapì
88	prefix .....	unlapì
89	infix .....	gitlapì
90	suffix .....	hulapì
91	synonym .....	síngkahulugán, kasíngkahulugán
92	syllable .....	panítig
93	syllabication .....	sapanítig
94	syllabary .....	talápantigan
95	homonym .....	kabigkás
96	antonym .....	kagantímbigkás

## DALÚB-ÍSIPAN

(Psychology)

1	psychology .....	dalúb-ísipan, ísipan
2	psychologist .....	dalúb-ísip
3	psychological .....	dalúb-ísipnín
4	mind .....	isip
5	mental .....	isipnín ( <i>isipanin</i> )
6	psychic, psychical .....	maisip
7	thought (n.) .....	ísipin
8	thought (on concrete matters) .....	tukuyáng ísipin
9	thought (on abstract matters) .....	alibáng ísipin
10	think (v.) .....	mag-ísip, ísipin
11	thinking .....	pag-iisip
12	ideation .....	saisip
13	idea .....	kaisipán
14	thinking apparatus, mentality .....	isipán
15	intellect (n.) .....	pag-iisip
16	intellectual (n.) .....	isipnón
17	the intellectual class .....	kaisipnunan
18	intellectual (adj.) .....	páng-isipán, makáisipnón
19	intellectualism .....	pagkámakáisipnón
20	intelligent .....	matalino
21	intelligence (1) .....	talino, katalinuhan
22	intelligence (2) (spy info.) .....	pamalay
23	intelligence (3) (spy service) .....	pámalayán
24	intelligentsia .....	sántalinuhan
25	perspicacity .....	talisik, katalisikan
26	talent .....	talihilig, katalihiligan ( <i>talino + hilig</i> )
27	talented .....	matalihilig
28	learn (n.) .....	matuto
29	learning .....	satuto
30	lore .....	alam
31	knowledge .....	kaalaman
32	knowledgeable, learned .....	maalam
33	wisdom .....	dunong, karunungan
34	wise .....	marunong
35	concept .....	dalumat
36	conception .....	kadalumatan
37	conceptual .....	dalumatin

38	sense	dandám
39	sensation	karandamán
40	emotion	sandandám
41	emotional (1) (person)	marandamin
42	emotional (2) (abstract)	sandandamin
43	feeling	dandamin, pakirandam
44	consciousness	malay
45	conscious	máymalay
46	unconscious	waláng malay, awángmalay
47	subconsciousness, subconscious	kubmalay
48	superconsciousness	higmalay
49	ego	kaakuhán ( <i>akó</i> )
50	alter-ego	haliakó
51	awareness	inó, kainuhán
52	unawareness	kawaláng-inó
53	aware	nakáiinó, náiinó
54	unaware	dínakáiinó, dínáiinó
55	understanding (faculty of)	unawà, páng-unawà
56	understanding (act of)	pagkáunawà
57	misunderstanding	dípagkáunawà
58	understanding (adj.)	maunawaín
59	understanding (agreement)	únawaan, kásunduan
60	understanding (v.)	unawain
61	comprehension	katalusán, talós
62	comprehend (v.)	matalós, talusín
63	lack of comprehension	kasahulán ng katalusán
64	interest (n.)	wili, kawilihan
65	interesting (adj.)	kawiliwili
66	interst (v.)	iwili, wilihin
67	hunch	antiló
68	suspicion	hinalà
69	supposition	akalà
70	belief	paniwalà
71	confidence	tiwalà
72	innocence	kawaláng-muwáng
73	innocent	waláng-muwáng
74	training (experience)	kasayanáy
75	training (act of)	pagsasanay
76	conduct	gawí
77	behavior	asal
78	behavior pattern	kaasalan
79	collective behavior	líkuming asal
80	group behavior	lípuning asal

81	ideal .....	ulirán
82	idealist .....	makáulirán, maulirán
83	idealism .....	pagkámakáulirán, pagkámaulirán
84	act .....	gawâ
85	action .....	kagawaán, bisà
86	reaction .....	balibisà
87	reflex .....	balikusà
88	stimulus .....	ganyák
89	response .....	tugón
90	fact .....	baghâ
91	event .....	balaghâ, yari
92	phenomenon .....	kababalaghan
93	sensitive .....	matúgunin
94	sensitivity .....	pagkámatúgunin
95	habit .....	ugali
96	custom .....	kaugalián
97	way .....	gawí
98	convention .....	kagawián
99	conventional (adj.) .....	kagawianin
100	will (n.) .....	loób
101	will (v.) .....	loobín
102	will power .....	lakásloób
103	spirit (1) (psy.) .....	lagyô
104	spirit (2) .....	batlaya
105	spirit (3), soul .....	káluluwá
106	spirit (4) .....	diwà
107	willing .....	mayloób
108	willingness .....	pagkámayloób
109	willful .....	maloobin
110	volition .....	kusà
111	voluntary .....	kinusà, kusanloób
112	voluntarily .....	pakusâ
113	discipline .....	takdáng-asal, disiplina
114	criterion .....	pánuntunán
115	delinquent .....	dalinsíl
116	delinquency .....	kadalinsilán
117	juvenile delinquency .....	kadalinsilán ng kabataan
118	juvenile delinquent .....	kabataang dalinsíl
119	adaptation .....	saangay
120	adaptive .....	angayin
121	group work .....	lípuning gáwain, lípuning paggawâ
122	community .....	pámayanán

<b>123</b>	environment .....	kaligirán
<b>124</b>	childhood environment .....	kámulatan, kinámulatan
<b>125</b>	habitat .....	tírahanan
<b>126</b>	heredity .....	kamanahan
<b>127</b>	background .....	sanligan
<b>128</b>	education (learning) .....	katuruan
<b>129</b>	adult .....	násagulang
<b>130</b>	adult education .....	pagtuturò sa násagulang
<b>131</b>	foolishness .....	kaululán
<b>132</b>	foolish (adj.) .....	ulól
<b>133</b>	fool (n.) .....	ulól
<b>134</b>	absent-mindedness .....	pagkátagulimót
<b>135</b>	absent-minded .....	tagulimót
<b>136</b>	ignorance .....	kamangmangán
<b>137</b>	ignorant .....	mangmáng
<b>138</b>	illiteracy .....	díkanulatán, kamaangán, díkaalamáng bu- masa at sumulat
<b>139</b>	illiterate .....	dínulát, máang, dímaalám bumasa at sumulat
<b>140</b>	literacy .....	kanulatán
<b>141</b>	literate .....	nulat
<b>142</b>	dull .....	tangá
<b>143</b>	dullness .....	katangahán
<b>144</b>	stupidity .....	kahangalán
<b>145</b>	stupid .....	hangál
<b>146</b>	moronism .....	katunggakán
<b>147</b>	moron .....	tunggák
<b>148</b>	imbecility .....	katulalaán
<b>149</b>	imbecile .....	tulalâ
<b>150</b>	idiocy .....	kaungasán
<b>151</b>	idiot .....	ungás
<b>152</b>	crazy (adj.) .....	balíw
<b>153</b>	image .....	laragwáy
<b>154</b>	imagination (generic term) .....	guníguní
<b>155</b>	imagination (foreboding) .....	salagimsim
<b>156</b>	imagination (poetic) .....	haraya
<b>157</b>	imagination (idealistic) .....	handurawan
<b>158</b>	inspiration .....	sigyá, sigliwà
<b>159</b>	appeal (n.) .....	gayuma
<b>160</b>	happiness .....	ligaya, kaligayahan
<b>161</b>	humor .....	katatawanán, pampatawá, pagpapatawá
<b>162</b>	recreation .....	mulínsiglá
<b>163</b>	dissipation .....	paglilimayón
<b>164</b>	appetition .....	hilig

<b>165</b>	appreciation .....	pagpápahalgá
<b>166</b>	attitude .....	sáloobín, kalooban
<b>167</b>	morale .....	katatagáng-loób
<b>168</b>	morals (n.) .....	sansanlingan
<b>169</b>	morals (sc.) .....	palásanlingan
<b>170</b>	morality .....	kasanlingán, kagandahang-asal
<b>171</b>	conscience .....	budhî
<b>172</b>	good .....	buti, kabutihán
<b>173</b>	bad .....	samâ
<b>174</b>	evil .....	kasamaán
<b>175</b>	virtue .....	mabuting gawî
<b>176</b>	vice .....	masamáng gawî
<b>177</b>	trait .....	panangì
<b>178</b>	character .....	sangkatángian
<b>179</b>	inherited character .....	minanang sangkatángian
<b>180</b>	acquired character .....	nátamóng sangkatángian
<b>181</b>	dominant character .....	nánanaíg na sangkatángian
<b>182</b>	recessive character .....	dáiging sangkatángian
<b>183</b>	characteristic .....	katángian
<b>184</b>	peculiarity .....	kakanyahán
<b>185</b>	atavistic .....	mapanaulî
<b>186</b>	circumstances .....	mgá kapangyayari
<b>187</b>	evaluation .....	paghahalgá
<b>188</b>	evaluate .....	halgahán
<b>189</b>	dimension .....	sukod (Bis.)
<b>190</b>	efficient .....	mataláb
<b>191</b>	efficiency .....	katalbán ( <i>katalabán</i> )
<b>192</b>	equilibrium .....	katiningan
<b>193</b>	error .....	malî, kamalián
<b>194</b>	selection .....	pilian
<b>195</b>	random choice .....	alisagáng pili
<b>196</b>	sample .....	halímbagay
<b>197</b>	random sample .....	alisagáng halímbagay
<b>198</b>	sampling .....	pagháhalímbagay
<b>199</b>	statistic .....	himalak
<b>200</b>	chart .....	taltaguhit
<b>201</b>	diagram .....	gúhitin
<b>202</b>	graph .....	talangguhit
<b>203</b>	observation .....	masíd
<b>204</b>	empirical .....	másirin
<b>205</b>	empirical method .....	másiring pámamaraán
<b>206</b>	theory .....	hunà

<b>207</b>	basis .....	batayán
<b>208</b>	classification .....	paláurian
<b>209</b>	phase .....	yugtō
<b>210</b>	variation .....	kaaligán
<b>211</b>	diversity .....	balaki, kabalakihan
<b>212</b>	similarity .....	pagkákahawíg
<b>213</b>	combination .....	pálakipan
<b>214</b>	expectation .....	kaasahan
<b>215</b>	correlation .....	satugnáy
<b>216</b>	deviation .....	kaliwasán, liwás
<b>217</b>	direction .....	tungo
<b>218</b>	mental health .....	isipníng lusóg
<b>219</b>	mental disease .....	isipníng balatian, balatian ng isip
<b>220</b>	mental attitude .....	isipníng saloobin
<b>221</b>	mental state .....	isipníng himtang
<b>222</b>	introvert .....	loóbwili
<b>223</b>	extrovert .....	luwáswili

# 7

## BATNAYAN

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Ang mgá Kahatián ng Batnayan . . . . .	247
Matwiran . . . . .	249
Paláásalan . . . . .	261
Palásantingan . . . . .	264
Batháalan . . . . .	267

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# ANG MGÁ KAHATIÁN NG BATNAYAN

*(The Divisions of Philosophy)*

## MAPAMUNÁNG BATNAYAN

*(Critical Philosophy)*

### 1 (Dalúb) Álaman *(Epistemology)*

- A Dalúb-Ísiping Álaman  
*(Psychological Epistemology)*
- B Labawsugnayang Álaman  
*(Metaphysical Epistemology)*

### 2 (Dalúb) Matwiran *(Logic)*

- A Pasakláv, Aristotelhín, Maanyô o Kinágawiáng Matwiran  
*(Deductive, Aristotelian, Formal or Traditional Logic)*
- B Labawsugnayin o Hegelhíng Matwiran  
*(Metaphysical or Hegelian Logic)*
- C Mapanagisag o Sipnayang Matwiran  
*(Symbolic or Mathematical Logic)*
- D Pabuód, Sinalapat o Sangkaping Matwiran; Pámaranán  
*(Inductive, Applied or Material Logic; Methodology)*
- E Tílawing Matwiran  
*(Experimental Logic)*

### 3 (Dalúb) Halgahan *(Axiology)*

- A (Dalúb) Asalan; Palásanlinging Batnayan  
*(Ethics; Moral Philosophy)*
- B (Dalúb) Santingan  
*(Aesthetics)*

## MAPAMALAGÁY, HUNAÍN O TAGNÁS NA BATNAYAN

*(Speculative, Theoretical or Pure Philosophy)*

### 1 Labawsugnayan *(Metaphysics)*

- A Dalúbmágingan  
*(Ontology)*
- B Dalúbmáyawan  
*(Cosmology)*
  - I Talámáyawan  
*(Cosmography)*
  - II Mulmáyawan  
*(Cosmogony)*

III Batnayan ng Kalikasan  
(*Philohophy of Nature*)

- Ang Sangkaping Daigdíng  
(*The Material World*)
- Tao: Labawsugnayin, Batnayin o Matwiring Dalúb-Ísipan  
(*Man: Metaphysical, Philosophical or Rational Psychology*)

IV Batnayan ng Sipnayan; Damò  
(*Philosophy of Mathematics; Quantity*)

C Palábathálaan; Likás na Bathálaan; Likás na Ágamahan  
(*Theodicy; Natural Theology; Natural Religion*)

2 Sinalapat o Panggáwaang Batnayan  
(*Applied or Practical Philosophy*)

A Mgá Kagawaranin o Tanging Batnayan  
(*Departmental or Special Philosophies*)

- I Batnayan ng Ágamahan  
(*Philosophy of Religion*)
- II Batnayan ng Batás at Paláhatulán  
(*Philosophy of Law and Jurisprudence*)
- III Batnayan ng Kasaysayan  
(*Philosophy of History*)
- IV Batnayan ng Páturuán  
(*Philosophy of Education*)
- V Batnayan ng Ulnungin at Pampulítikáng Buhay  
(*Philosophy of Social and Political Life*)
- VI Atb.

B Mgá Sangkúruan  
(*Ideologies*)

- I Pagkámakátahás  
(*Positivism*)
- II Pagkámakásangkáp  
(*Materialism*)

C Mgá Pansariling Batnayan  
(*Personal Philosophies*)

- I Ang Batnayan ni Socrates  
(*The Philosophy of Socrates*)
- II Ang Batnayan ni Heidegger  
(*The Philosophy of Heidegger*)
- III Atb.

## MATWIRAN

(Logic)

1	philosophy .....	batnayan ( <i>batayán + hánayan</i> )
2	basic, fundamental .....	batayán, bátayin, bátayanin
3	love .....	pag-ibig
4	wisdom .....	dunong, karunungan
5	science .....	aghám
6	material (formal) object of a science .....	masangkaping (maanyóng) layon ng isáng aghám
7	knowledge .....	alam, kaalaman
8	certain and demonstrated knowledge .....	tiyák at naipakitang alam
9	organized or systematized knowledge .....	isinatatag o isinaayos na kaalaman
10	causal knowledge .....	sanhiing alam
11	reason (faculty of) .....	pangmatwíd
12	reason (explanation) .....	matwíd
13	ultimate reason .....	katapusáng matwíd
14	cause .....	sanhî
15	proximate cause .....	malapit na sanhî
16	ultimate cause .....	katapusáng sanhî
17	empirical (empiriological) science .....	másiring aghám
18	metaphysical science .....	labawliksaning aghám
19	philosophical science .....	batnaying aghám
20	human intellect .....	táuhing pag-iisip
21	branches of philosophy .....	mgá sangáy ng batnayan
22	logic .....	(dalúb) matwiran
23	formal logic .....	maanyóng matwiran
24	material logic .....	masangkaping matwiran
25	art .....	sining
26	correct .....	wastô
27	valid .....	maysaligán
28	consistent .....	maúgnayin
29	incorrect .....	díwastô
30	invalid .....	dímaysaligán
31	inconsistent .....	dímaúgnayin
32	correctness .....	kawastuhán
33	validity .....	pagkámaysaligán
34	consistency .....	pagkámaúgnayin
35	incorrectness .....	díkawastuhán
36	invalidity .....	pagkádímaysaligán

37	inconsistency .....	pagkádi <sup>a</sup> maúgnayin
38	truth .....	katutohanan
39	logical truth .....	matwíraning katutohanan
40	logically true .....	pamatwirang totoó
41	true .....	totoó
42	false .....	dítotoó
43	falsity, falsehood .....	pagkádi <sup>a</sup> totoó
44	It is true .....	Ito'y totoó
45	It is false .....	Ito'y dítotoó
46	doubtful .....	maalinlangán
47	undetermined .....	dítinakdaán
48	thought .....	ísipin
49	thinking .....	pag-iisíp
50	correct thinking .....	wastóng pag-iisíp
51	intellection .....	pag-isip
52	idea .....	kaisipán
53	concept .....	dalumat
54	judgment .....	kahatulán
55	reasoning .....	pagmamawíd
56	senses .....	mgá dandám ( <i>damdám</i> )
57	sensation .....	karandamán
58	perception .....	watas
59	sense-image, phantasm .....	laragwáy-dandám
60	phantasy, fantasy, fancy, imagination .....	guniguní
61	attention .....	kapansinán
62	analysis .....	pagsusuri, súrian
63	synthesis .....	lagumtikhâ
64	comparison .....	hambíng, sahambíng, paghahambíng
65	reflection .....	pagdidilidili, sadiñi
66	abstraction .....	kabasalan
67	physical abstraction .....	sugnaying kabasalan
68	mathematical abstraction .....	sipnaying kabasalan
69	metaphysical abstraction .....	labawliksoning kabasalan
70	simple apprehension .....	payák na tantô
71	essence .....	salik
72	quiddity .....	kaitungaán ( <i>ka- + itó + ngâ + -an</i> )
73	nature, essence (of a thing) .....	kalikasan
74	essential elements .....	mgá sáliking mulhagi
75	accidental elements .....	mgá pasumalang mulhagi
76	concept of first (second) intention .....	dalumat ng unang (ikalawáng) tangkâ
77	mind .....	ísip
78	concrete concept .....	síyahing dalumat
79	abstract concept .....	basal na dalumat

80	form .....	anyô
81	matter .....	butáng (Hlg.)
82	intuitive concept .....	loób-álaming dalumat
83	abstractive concept .....	mapígaing dalumat
84	implicit concept .....	hiwatíg na dalumat
85	explicit concept .....	lantád na dalumat
86	adequate (complete) concept .....	sapát (ganáp) na dalumat
87	inadequate (incomplete) concept .....	dísapát (díganáp) na dalumat
88	identical concepts .....	mgá kasiyangáng dalumat
89	different concepts .....	mgá magkáibáng dalumat
90	compatible concepts .....	mgá magkásundóng dalumat
91	incompatible concepts .....	mgá dímagkásundóng dalumat
92	absolute concept .....	wagás na dalumat
93	connotative concept .....	másaliksiking dalumat
94	substance .....	sangkáp
95	accident (n.) .....	pasumalà
96	connex concept .....	maykinalamang dalumat
97	disparate concept .....	dídawiting dalumat
98	positive concept .....	tahás na dalumat
99	negative concept .....	balíng na dalumat
100	connected concepts .....	magkákaruugtóng na dalumat
101	unconnected concepts .....	dímagkákaruugtóng na dalumat
102	convertible concept .....	mababalinyóng dalumat
103	nonconvertible concept .....	dímababalinyóng dalumat
104	relative concepts .....	mgá matugnaying dalumat
105	contradictory concepts .....	nagkákasalungatang dalumat
106	contrary concepts .....	nagkákalabang dalumat
107	privative concept .....	mapagkaít na dalumat
108	clear (distinct) concept .....	malinaw na dalumat
109	obscure (vague) concept .....	malabong dalumat
110	transcendental concept .....	igpawing dalumat
111	simple concept .....	payák na dalumat
112	composite concept .....	pinaglakíp na dalumat
113	universal concept .....	lahatáng dalumat
114	particular concept .....	tíngiang dalumat
115	collective concept .....	líkuming dalumat
116	singular concept .....	ísahang dalumat
117	universals of first intention .....	mgá lahatán ng unang tangkâ
118	direct universals .....	mgá túwirang lahatán
119	predicaments .....	mgá katagurián
120	categories .....	mgá mulisip ( <i>múlaang isip</i> )
121	real universals .....	mgá tunay na lahatán

122	immediate universals .....	mgá kagyát na lahatán
123	universals of second intention .....	mgá lahatán ng ikalawáng tangkâ
124	logical universals .....	mgá matwíraning lahatán
125	predicables .....	mgá táguriín
126	quantity .....	damò (Bis.)
127	quality .....	kaurián
128	relation .....	saugnáy, ugnayan
129	action .....	bilos
130	passion (logic) .....	tanggáp
131	time (duration) .....	tión (Hlg.)
132	place .....	lunán
133	posture .....	barog (Sgb.)
134	habit ( <i>habitus</i> ) .....	karamtán ( <i>damít</i> )
135	species .....	sarisipin ( <i>sarì ng ísipin</i> )
136	rational animal .....	matwiring hayop
137	genus .....	urispin ( <i>urì ng ísipin</i> )
138	specific difference .....	tiyaking kaibhán
139	logical property .....	matwíraning kaangkinán
140	logical accident .....	matwíraning pasumalà
141	term .....	takay (ugat ng <i>talakay</i> )
142	word .....	salitâ
143	categorematic word .....	tákaying salitâ
144	syncategorematic word .....	katákaying salitâ
145	acategorematic word .....	awántákaying salitâ
146	sign .....	tandâ
147	signification of terms .....	satandâ ng mgá takay
148	thing signified .....	bagay na isinatandâ
149	signifying thing .....	nagsasatandáng bagay
150	formal sign .....	maanyóng tandâ
151	instrumental sign .....	makásangkapang tandâ
152	natural sign .....	likás na tandâ
153	conventional sign .....	kágawianing tandâ
154	arbitrary sign .....	alitakdaing tandâ
155	concrete term .....	síyahing takay
156	abstract term .....	basal na takay
157	simple term .....	payák na takay
158	complex term .....	hugnáy na takay
159	common term .....	pámbalanáng takay
160	proper term .....	pantanging takay
161	univocal term .....	tíyaking takay
162	equivocal term .....	álanganing takay
163	analogous terms .....	mgá magkawangking takay
164	analogy .....	sawangkî, pagwawangkî

165	analogy by proportion .....	pagwawangkî sagitang hagwáy
166	analogy by attribution .....	pagwawangkî sagitang saangkín
167	supposition of terms .....	sahulog ng mgá takay
168	material supposition .....	masangkaping saahulog
169	formal supposition .....	maanyóng saahulog
170	logical supposition .....	matwíraning saahulog
171	real supposition .....	tunay na saahulog
172	absolute supposition .....	wagás na saahulog
173	personal supposition .....	makásariling saahulog
174	essential supposition .....	saliking saahulog
175	accidental supposition .....	pasumalang saahulog
176	distributive supposition .....	báhagihíng saahulog
177	collective supposition .....	líkuming saahulog
178	comprehension (philo.), intension, connotation .....	kasaliksikán
179	extension, denotation, application (philo.) ...	kadayunan
180	definition .....	turing, katuringan
181	meaning .....	kahulugán
182	nominal definition .....	pasapyáw na katuringan
183	etymological definition .....	palámuhatníng katuringan
184	definition by synonym .....	katuringan sagitang síngkahulugán
185	descriptive definition .....	lárawaníng katuringan
186	definition by example .....	katuringan sagitang halímbawà
187	extensive definition .....	malaganap na katuringan
188	real definition .....	tunay na katuringan
189	essential definition .....	masalik na katuringan
190	proper or distinctive definition .....	angkóp o maibahing katuringan
191	accidental definition .....	pasumalang katuringan
192	causal definition .....	masanhíng katuringan
193	fallacy of circular definition .....	kasinsayán ng íkuting katuringan
194	fallacy of figurative definition .....	kasinsayán ng táyutayíng katuringan
195	fallacy of too-narrow definition .....	kasinsayán ng kaykitid na katuringan
196	fallacy of too-wide definition .....	kasinsayán ng kaylawak na katuringan
197	fallacy of obscure definition .....	kasinsayán ng malabong katuringan
198	fallacy of negative definition .....	kasinsayán ng tanggihíng katuringan
199	fallacy of redundant definition .....	kasinsayán ng maligoy na katuringan
200	fallacy of accidental definition .....	kasinsayán ng pasumalang katuringan
201	division .....	hati
202	resolution .....	hisikot
203	resolve .....	hisikutin
204	resolving .....	paghisikot
205	whole .....	buô

<b>206</b>	part .....	hati, kahati, bahagi
<b>207</b>	real division .....	tunay na hati
<b>208</b>	logical division .....	matwíraning hati
<b>209</b>	physical division .....	lawasning hati
<b>210</b>	essential division .....	sáliking hati
<b>211</b>	integral division .....	buúmblanging hati
<b>212</b>	metaphysical division .....	labawliksoning hati
<b>213</b>	affirmative judgment .....	sang-áyuning kahatulán
<b>214</b>	negative judgment .....	tanggihing kahatulán
<b>215</b>	agree .....	sumáng-ayon
<b>216</b>	disagree .....	dísunáng-ayon
<b>217</b>	subject term .....	simunong takay
<b>218</b>	predicate term .....	panaguríng takay
<b>219</b>	copula .....	panumpáy ( <i>sumpáy</i> , Hlg., kabít)
<b>220</b>	proposition .....	palagáy
<b>221</b>	declarative sentence .....	pasaysáy na pangungusap
<b>222</b>	oral expression .....	pasalitáng pahayag
<b>223</b>	assertion .....	giítsabi
<b>224</b>	denial .....	pagtanggí
<b>225</b>	negation .....	kabalingán, sabalíng
<b>226</b>	quantifier .....	pandamò
<b>227</b>	no (quantifier) .....	waláng (pandamò)
<b>228</b>	none .....	walâ
<b>229</b>	all .....	lahát
<b>230</b>	some .....	ilán
<b>231</b>	every .....	bawa't
<b>232</b>	a few .....	may ilán
<b>233</b>	several .....	mgá ilán
<b>234</b>	hence .....	kayá't
<b>235</b>	then (consequence) .....	sagayón
<b>236</b>	therefore .....	kung gayón, samakatwíd
<b>237</b>	general type .....	lahatáng tipo
<b>238</b>	special type .....	tanging tipo
<b>239</b>	universal quantifier .....	lahatáng pandamò
<b>240</b>	universal proposition .....	lahatáng palagáy
<b>241</b>	particular proposition .....	tíngiang palagáy
<b>242</b>	affirmative proposition .....	sang-áyuning palagáy
<b>243</b>	negative proposition .....	tanggihing palagáy
<b>244</b>	universal affirmative proposition .....	lahatáng sang-áyuning palagáy
<b>245</b>	universal negative proposition .....	lahatáng tanggihing palagáy
<b>246</b>	particular affirmative proposition .....	tíngiang sang-áyuning palagáy
<b>247</b>	particular negative proposition .....	tíngiang tanggihing palagáy
<b>248</b>	categorical proposition .....	mulisiping palagáy

<b>249</b>	hypothetical proposition .....	palágaying palagáy
<b>250</b>	simple proposition .....	payák na palagáy
<b>251</b>	single or singular proposition .....	ísahang palagáy
<b>252</b>	restrictive proposition .....	higpiting palagáy
<b>253</b>	explicative proposition .....	láwaking palagáy
<b>254</b>	modal proposition .....	pálasakíng palagáy
<b>255</b>	mode .....	palasák
<b>256</b>	necessary proposition .....	kailangang palagáy
<b>257</b>	must be .....	nararapat magíng, nararapat ma-
<b>258</b>	impossible proposition .....	dímaáaring palagáy
<b>259</b>	cannot be .....	dímaáaring magíng, dímakaka-
<b>260</b>	possible proposition .....	maáaring palagáy
<b>261</b>	can be .....	maáaring magíng
<b>262</b>	contingent proposition .....	pasipalang palagáy
<b>263</b>	need not be .....	díkailangang magíng, díkailangang ma-
<b>264</b>	composite proposition .....	pinaglakíp na palagáy
<b>265</b>	multiple proposition .....	máramiháng palagáy
<b>266</b>	compound proposition .....	langkaping palagáy
<b>267</b>	overtly multiple proposition .....	pahayág na máramiháng palagáy
<b>268</b>	copulative proposition .....	sumpaying palagáy
<b>269</b>	adversative proposition .....	súmanging palagáy
<b>270</b>	relative proposition .....	matugnaying palagáy
<b>271</b>	causal proposition .....	sanhiing palagáy
<b>272</b>	comparative proposition .....	hambinging palagáy
<b>273</b>	covertly multiple proposition .....	patagóng máramiháng palagáy
<b>274</b>	exclusive proposition .....	dílangkaping palagáy
<b>275</b>	inference .....	hinuhà (JVP)
<b>276</b>	argument .....	katwiran
<b>277</b>	deduction .....	pánaklawan
<b>278</b>	induction .....	pámuurán
<b>279</b>	inductive inference (reasoning) .....	pabuód na hinuhà (pagmamawíd)
<b>280</b>	immediate inference .....	túwirang hinuhà
<b>281</b>	mediate inference .....	tálaytaying hinuhà
<b>282</b>	alone .....	nag-iisá, lamang
<b>283</b>	none but, not one but .....	walã kundĩ
<b>284</b>	solely .....	tangì lamang
<b>285</b>	exceptive proposition .....	táliwasíng palagáy
<b>286</b>	except .....	maliban sa
<b>287</b>	reduplicative proposition .....	balík-úlitíng palagáy
<b>288</b>	specificative proposition .....	tángiing palagáy
<b>289</b>	inceptive proposition .....	múlaiing palagáy
<b>290</b>	desitive proposition .....	tápusing palagáy

<b>291</b>	conditional proposition .....	maypasubaling palagáy
<b>292</b>	disjunctive proposition .....	kasumalahing palagáy
<b>293</b>	conjunctive proposition .....	dísabaying palagáy
<b>294</b>	opposition of propositions .....	sasumáng (pagkákasumáng) ng mgá palagáy
<b>295</b>	logically opposed .....	pamatwirang sumáng
<b>296</b>	Contradiction .....	Kasalungatán
<b>297</b>	contradictories .....	nagkákasálungatan
<b>298</b>	contradictory propositions .....	magkásalungat na palagáy
<b>299</b>	Law of Contradiction .....	Batás ng Kasalungatán
<b>300</b>	Contrariety .....	Pagkákalaban
<b>301</b>	contraries .....	magkákalaban
<b>302</b>	contrary proposition .....	kalabang palagáy
<b>303</b>	Law of Contrariety .....	Batás ng Pagkákalaban
<b>304</b>	Subcontrariety .....	Pagkákakubkalaban
<b>305</b>	subcontraries .....	magkákakubkalaban
<b>306</b>	subcontrary proposition .....	kubkalabang palagáy
<b>307</b>	Law of Subcontrariety .....	Batás ng Pagkákakubkalaban
<b>308</b>	Subalternation .....	Kubpálagayan
<b>309</b>	subaltern proposition .....	kubpalagáy
<b>310</b>	subalternant .....	kakubpalagáy
<b>311</b>	subalternate .....	kubpálagayin
<b>312</b>	Law of Subalternation .....	Batás ng Kubpálagayan
<b>313</b>	Square of Opposition .....	Parisukat ng Salungatan
<b>314</b>	eduction .....	sahangò
<b>315</b>	conversion .....	sabalinyô, pagbalinyô
<b>316</b>	convertend .....	bálinyuin
<b>317</b>	converse .....	kabalinyuán
<b>318</b>	obversion .....	sabalitanggihan, pagbalitanggihan
<b>319</b>	obvertend .....	balitanggihan
<b>320</b>	obverse .....	kabalitanggihán
<b>321</b>	contraposition .....	salabantahás, paglabantahás
<b>322</b>	contrapotend .....	labantáhasin
<b>323</b>	contrapose .....	kalabantahasán
<b>324</b>	partial contrapositive .....	báhagiháng labantahás
<b>325</b>	full contrapositive .....	búuang labantahás
<b>326</b>	inversion .....	sabaligtád, pagbaligtád
<b>327</b>	invertend .....	báligtarin
<b>328</b>	inverse .....	kabaligtarán
<b>329</b>	partial inverse .....	báhagiháng baligtarán
<b>330</b>	full inverse .....	búuang baligtarán
<b>331</b>	nomenclature of a syllogism .....	kangalanán ng isáng sangmatwiran
<b>332</b>	major term .....	kalakháng takay

<b>333</b>	minor term .....	kalit-áng takay
<b>334</b>	middle term .....	gitnáng takay
<b>335</b>	major premise .....	kalakháng kahunaan
<b>336</b>	minor premise .....	kalit-áng kahunaan
<b>337</b>	conclusion .....	pasyahin
<b>338</b>	fallacy .....	kasinsayán
<b>339</b>	fallacy of illicit major .....	kasinsayán ng lábaging kalakhán
<b>340</b>	fallacy of illicit minor .....	kasinsayán ng lábaging kalit-án
<b>341</b>	fallacy of undistributed middle term .....	kasinsayán ng díbinahaging gitnáng takay
<b>342</b>	distributed .....	binahagi
<b>343</b>	universal .....	lahatán
<b>344</b>	undistributed .....	díbinahagi
<b>345</b>	particular .....	tíngian
<b>346</b>	fallacy of four terms .....	kasinsayán ng apat na takay
<b>347</b>	fallacy of negative premises .....	kasinsayán ng mgá tanggihing kahunaan
<b>348</b>	fallacy of particular premises .....	kasinsayán ng mgá tíngiang kahunaan
<b>349</b>	first principle .....	unang símulain
<b>350</b>	derived principle .....	hinangong símulain
<b>351</b>	Principle of Identity .....	Símulain ng Kasiyangaán
<b>352</b>	Principle of Contradiction .....	Símulain ng Kasalungatán
<b>353</b>	Principle of Excluded Middle .....	Símulain ng Nahisamang Gitnâ
<b>354</b>	Principle of Reciprocal Identity .....	Símulain ng Kaísahing Kasiyangaán
<b>355</b>	Principle of Reciprocal Non-Identity .....	Símulain ng Kaísahing Díkasiyangaán
<b>356</b>	The <i>Dictum de Omni</i> (Law of All) .....	Ang Batás ng Lahát
<b>357</b>	The <i>Dictum de Nullo</i> (Law of None) .....	Ang Batás ng Walâ
<b>358</b>	hypothetical syllogism .....	pálagaying sangmatwiran
<b>359</b>	conditional syllogism .....	maypasubaling sangmatwiran
<b>360</b>	constructive mood, <i>modus ponens</i> .....	sáyuning panagano
<b>361</b>	destructive mood, <i>modus tollens</i> .....	tanggihing panagano
<b>362</b>	implication .....	hiwatig
<b>363</b>	formal implication .....	maanyóng hiwatig
<b>364</b>	material implication .....	masangkaping hiwatig
<b>365</b>	if .....	kung
<b>366</b>	unless, if ... then .....	kung hindi, kundí
<b>367</b>	antecedent .....	náuná
<b>368</b>	consequent .....	sumunód
<b>369</b>	consequence .....	kinasumundan
<b>370</b>	pure conditional syllogism .....	tagnás na maypasubaling sangmatwiran
<b>371</b>	mixed conditional syllogism .....	haluáng maypasubaling sangmatwiran
<b>372</b>	affirm, posit .....	isayon ( <i>isáng-ayon</i> ), sayunin
<b>373</b>	deny, sublate .....	itanggí, tanggihán
<b>374</b>	disjunctive (alternative) syllogism .....	kasumalahing sangmatwiran
<b>375</b>	disjunct .....	kasumala

<b>376</b>	alternative .....	kasalisí
<b>377</b>	exclusive disjunctive syllogism .....	pahiwaláy na kasumalahing sangmatwiran
<b>378</b>	inclusive disjunctive syllogism .....	pasamang kasumalahing sangmatwiran
<b>379</b>	valid mood .....	maysaligang panagano
<b>380</b>	invalid mood .....	dímaysaligang panagano
<b>381</b>	<i>modus ponendo tollens</i> .....	sáyuning-tanggihing panagano
<b>382</b>	<i>modus tollendo ponens</i> .....	tanggihing-sáyuning panagano
<b>383</b>	conjunctive syllogism .....	dísabaying sangmatwiran
<b>384</b>	conjuncts .....	mgá dugtóng
<b>385</b>	variations of the syllogism .....	mgá kaaligán ng sangmatwiran
<b>386</b>	enthymeme .....	maysaisip
<b>387</b>	Enthymeme of the First (Second, etc.) Order ..	Maysaisip ng Unang (Ikalawáng, atb.) Kasun- rán
<b>388</b>	suppressed major .....	sinugpóng kalakhán
<b>389</b>	suppressed minor .....	sinugpóng kalit-án
<b>390</b>	suppressed conclusion .....	sinugpóng pasyahin
<b>391</b>	polysyllogism .....	damisangmatwiran
<b>392</b>	prosyllogism .....	mulsangmatwiran
<b>393</b>	episylogism .....	hangusangmatwiran
<b>394</b>	prosyllogistic polysyllogism .....	mulsangmatwiraning damisangmatwiran
<b>395</b>	episylogistic polysyllogism .....	hangusangmatwiraning damisangmatwiran
<b>396</b>	sorites .....	hánayan
<b>397</b>	Aristotelian sorites .....	Aritotelhíng hánayan
<b>398</b>	Goclenian sorites .....	Goklenhíng hánayan
<b>399</b>	train of reasoning .....	súnuran ng pagmamatwíd
<b>400</b>	epichereme .....	maysakamáy
<b>401</b>	complex single (double) epichereme .....	hugnáy na ísahang (dálwahang) maysaka- máy
<b>402</b>	dilemma .....	awámpilí
<b>403</b>	simple constructive (destructive) dilemma ..	payák na sáyuning (tanggihing) awámpilí
<b>404</b>	complex constructive (destructive) dilemma	hugnáy na sáyuning (tanggihing) awámpilí
<b>405</b>	relational argument .....	pang-ugnayang katwiran
<b>406</b>	symmetry .....	parianyô
<b>407</b>	asymmetry .....	awámparianyô
<b>408</b>	nonsymmetry .....	diliparianyô
<b>409</b>	transitivity .....	pagkápalipát
<b>410</b>	intransitivity .....	dípagkápalipát
<b>411</b>	non-transitivity .....	dilipagkápalipát
<b>412</b>	symmetrical (asymmetrical) transitive argu- ment .....	parianyuing (awámparianyuing) palipat na katwiran
<b>413</b>	sophism .....	pamamalibad ( <i>balibad</i> Hlg., pabiróng pagsisi- nungalíng)
<b>414</b>	paralogism .....	sinsáymatwiran

<b>415</b>	fallacy in diction .....	kasinsayán sa katinigan
<b>416</b>	fallacy in language .....	kasinsayán sa wikà
<b>417</b>	fallacy of equivocation .....	kasinsayán ng alangansabi
<b>418</b>	fallacy of the ambiguous major (minor) .....	kasinsayán ng kabilaning kalakhán (kalit-án)
<b>419</b>	fallacy of the ambiguous middle .....	kasinsayán ng kabilaning gitnâ
<b>420</b>	amphiboly .....	kâbilaninsabi
<b>421</b>	fallacy of composition .....	kasinsayán ng sama
<b>422</b>	fallacy of division .....	kasinsayán ng hati
<b>423</b>	fallacy of accent or prosody .....	kasinsayán ng diín o bigkás
<b>424</b>	fallacy of figure of speech or diction .....	kasinsayán ng tayutay o katinigan
<b>425</b>	fallacy of thought (fallacy in the matter) .....	kasinsayán ng ísipin (kasinsayán ng paksâ)
<b>426</b>	fallacy of accident .....	kasinsayán ng pasumalâ
<b>427</b>	fallacy of absolute and qualified statements ..	kasinsayán ng má wagás at inuriang saád
<b>428</b>	fallacy of pretended or false cause .....	kasinsayán ng kunwari o dítoóong sanhî
<b>429</b>	fallacy of begging the question ( <i>petitio prin-</i> <i>cipii</i> ) .....	kasinsayán ng pangangatwiran ng pasyahin
<b>430</b>	fallacy of evading the question .....	kasinsayán ng pag-iwas sa súliranín
<b>431</b>	<i>argumentum ad populum</i> , appeal to the people .....	katwirang umaantíg sa sambayanán
<b>432</b>	<i>argumentum ad hominem</i> , appeal to the individual .....	katwirang umaantíg sa sarilintao
<b>433</b>	<i>argumentum ad baculum</i> , appeal to might ..	katwirang umaantíg sa lakás
<b>434</b>	<i>argumentum ad ignorantiam</i> , appeal to ig- norance .....	katwirang umaantíg sa kamangmangán
<b>435</b>	<i>argumentum ad auctoritatem</i> , appeal to authority .....	katwirang umaantíg sa kadalúbhasaán
<b>436</b>	<i>argumentum ad misericordiam</i> , appeal to pity .....	katwirang umaantíg sa awà
<b>437</b>	fallacy of many questions or interrogations ..	kasinsayán ng maraming pagtatanóng
<b>438</b>	argument from analogy .....	katwirang mulâ sa pagwawangkí
<b>439</b>	scientific method .....	agháming pámamaraán
<b>440</b>	observation .....	masíd, samasíd
<b>441</b>	experimentation .....	satiláw, pagtitiláw
<b>442</b>	scientific theory .....	agháming hunà
<b>443</b>	hypothesis .....	pálagayin
<b>444</b>	canon .....	tuntunan
<b>445</b>	canons of induction .....	mgá tuntunan ng pámuurán
<b>446</b>	statistical reasoning .....	paláúlating pagmamamtwíd
<b>447</b>	method of agreement .....	pámamaraán ng pagkakásundô
<b>448</b>	method of difference .....	pámamaraán ng kaibhán
<b>449</b>	joint method of agreement and difference ..	saníb na pámamaraán ng pagkákasundô at kaibhán
<b>450</b>	method of residues .....	pámamaraán ng mgá labí

<b>451</b>	method of concomitant variations .....	pámamaraán ng mgá kasamang kaaligán
<b>452</b>	probability .....	kalagmitán ( <i>lagmit</i> , Bis.)
<b>453</b>	probable .....	malagmít
<b>454</b>	testimony .....	pananaksí
<b>455</b>	average .....	balasak
<b>456</b>	circumstantial evidence .....	kapangyayaring katibayan

## PALÁÁSALAN

(Ethics)

1	ethics (1), the science .....	paláásalan, ásalan
2	ethics (2), the code .....	kaasalan
3	ethical (adj.) .....	paláásalin
4	human act .....	táuhing gawâ
5	act of man .....	gawâ ng tao
6	discipline .....	takdáng-asal, disiplina
7	disciplinarian .....	mapanakdáng-asal
8	human action .....	táuhing kagawaán
9	human conduct .....	táuhing gawî
10	human activity .....	táuhing gawain
11	behavior .....	asal
12	moral (n.), moral lesson .....	sanlíng
13	moral (1) (adj.) .....	palásanlingin
14	moral (2) (adj.) .....	masanlíng, magandáng asal
15	moral (3) (adj.) .....	pangkaasalán
16	morals (n.) .....	sansalingan
17	morals (sc.) .....	palásanlingan
18	moral act .....	gawáng masanlíng
19	moral regeneration .....	pangkaasaláng balikhaan
20	morality .....	kasanlingán, kagandahang-asal
21	immorality .....	díkasanlingán, díkagandahang-asal, karumháng-asal
22	morality of human conduct .....	kasanlingán ng táuhing gawî
23	philosophy .....	batnayan ( <i>batayán + haynayan</i> )
24	moral philosophy .....	palásanlinging batnayan
25	ethical theory .....	paláásaling hunà
26	ethical principle .....	paláásaling símulain
27	code of ethics .....	taláásalan
28	general ethics .....	lahatáng paláásalan
29	special ethics .....	tanging paláásalan
30	individual ethics .....	pansariling paláásalan
31	social ethics .....	ulhaying paláásalan
32	deliberate .....	sinadyâ
33	free .....	malayà
34	deliberate and free action .....	sinadyâ at maláyang kagawaán
35	will (n.) .....	loób
36	will (v.) .....	loobín

37	willful .....	kúsanloób
38	free will .....	maláyang-loób
39	deliberate free will .....	sinadyáng maláyang-loób
40	voluntary .....	pakusâ
41	voluntariness .....	kakusaán
42	reason .....	matwíd
43	human reason .....	táuhing matwíd
44	dictates of reason .....	mgá himatón ng matwíd
45	logic .....	matwiran
46	logical .....	matwiranin
47	logicalness .....	pagkámatwiranin
48	reasonable .....	makátwiran
49	reasonableness .....	pagkámakátwiran
50	rational .....	matwirin
51	rational animal .....	matwiring nilikhâ
52	understanding (faculty of) .....	unawà, pang-unawà, pagkáunawà
53	understanding (act of) .....	pagkáunawà
54	misunderstanding .....	dípagkáunawà
55	understanding (adj.) .....	maunawaín
56	understand (v.) .....	unawain
57	understanding (agreement) .....	únawaan, kásunduan
58	good .....	buti, kabutihán
59	evil .....	kasamaán
60	bad .....	samâ
61	vice .....	masamáng gawí
62	virtue .....	mabuting gawí
63	chastity .....	puri, kapurihan, kalinisang-puri
64	honor .....	dangál, karángalan
65	loyalty .....	katapatan
66	integrity .....	katiningang-asal, katapatang-asal
67	dignity .....	kahanagan, dignidád
68	dignified .....	mahanag
69	undignified .....	dímahanag
70	rectitude .....	katadlungán
71	correctness .....	kawastuhán
72	propriety .....	katumpakán
73	responsible (n.) .....	nanánagot
74	responsible (adj.) .....	mapanágutin
75	responsibility .....	kapanágutan, panánagutan
76	impute .....	ibintáng
77	imputability .....	kapamintangán
78	intellect .....	pag-iisip
79	knowledge .....	alam, kaalamán

80	character .....	sangkatángian
81	habit .....	ugali
82	nominal definition .....	pasapyáw na katuringan
83	real definition .....	tunay na katuringan
84	positive law .....	tahás na batás
85	natural law .....	likás na batás
86	moral law .....	palásanlinging batás
87	human law .....	táuhing batás
88	norm .....	daniw (salitáng-ugát ng <i>karaniwan</i> )
89	norm of morality .....	daniw ng kasanlingán
90	normal (1) (ordinary) .....	karaniwan
91	normal (2) (technical) .....	dániwin
92	standard .....	pámantayan
93	intention .....	tangkâ
94	object .....	layon
95	end (of action) .....	hantungan, layon
96	rule .....	tuntunin
97	rule of action .....	tuntunin ng kagawaán
98	agent (concrete) .....	kinagawâ
99	circumstance .....	kapangyayari
100	consequence .....	kináhinatnán
101	scandal .....	alingasngás, iskándaló
102	impediment to a human act .....	hadláng sa isáng táuhing gawâ
103	ignorance .....	kamangmangán
104	violence .....	karahasán
105	fear .....	takot
106	infancy .....	kamusmusán
107	idiocy .....	kaungasán
108	imbecility .....	katulalaán
109	stupidity .....	kahangalán
110	moron .....	tunggák
111	moronism .....	katunggakán
112	mental disease .....	sakit sa isip, isipníng sakit
113	conscience .....	budhî
114	commandments of God .....	mgá utos ng Bathalà (Diyós)
115	sanction (ethics) (n.) .....	palâ
116	obligation (ethics) .....	kautangan
117	right .....	karapatán
118	duty .....	katungkulan
119	demand (n.) .....	kahingián
120	patriotism .....	pagkámakábayan

## PALÁSANTINGAN

(Aesthetics)

1	aesthetics	palásantingan, santingan
2	aesthetic (1) (adj.)	palásantingin
3	aesthetic (2) (adj.)	masantíng ( <i>santíng</i> , Kpn.), santingin
4	art	sining
5	artistic	makásining
6	artful	masining
7	appreciation	pagpápahalgá
8	appreciate	pahalgahán
9	appreciative	mahalgahin
10	sensation	karandamañ
11	perception	watas
12	perceptive	watastin
13	visible	lantád, hantád
14	standardize	isapámantayan
15	happiness	ligaya, kaligayahan
16	merriment	sayá, kasayahán
17	joy	tuwā
18	joyfulness	katuwaán
19	delight	lugód
20	delightfulness	kalugurán
21	delightful	nakalúlugod
22	gay	galák
23	gaiety	kagalakán
24	fun	kátuwaan
25	funny	nakátatawá, katawá-tawá
26	humor	katatawanán, pampátawá, pagpápatawá
27	humorous	katawá-tawá
28	delectable	matakám-takám
29	inspiring	masigyá
30	interesting	kawili-wili
31	pleasant	kaigá-igaya
32	attractive	kaakit-akit
33	appearance	kaanyuán
34	formal	maanyô
35	informal	dímaanyô
36	pretty	marikít
37	prettiness	kariktán

38	ugly	pangit
39	ugliness	kapangitan
40	sloe-eyed	singkit
41	beauty	gandá, kagandahan
42	beautiful	magandá
43	extreme beauty	alindóg
44	extremely beautiful	maalindóg
45	perfect	himpit (Bis.)
46	perfection	kahimpitán
47	essence (abstract)	salík
48	symmetrical	parianyuin
49	asymmetrical	díparianyuin, tabingí
50	charm	halina
51	charming	kahalí-halina
52	lovable	kaibig-ibig
53	desirable	kanais-nais
54	tempting	nakatútuksó
55	appeal	gayuma
56	appealing	nakagágayuma
57	sex appeal	sáriing gayuma
58	sexy	masari
59	obsession	haling
60	infatuation	humaling
61	appetition	hilig
62	traditional	kinámihasnán
63	conventional (adj.)	kagawianin, kinágawián
64	bright morning	maliwanag na umaga
65	bright student	magalíng na mag-aarál
66	bright future	maningning na hináharáp
67	bright face	maaliwalas na mukhâ
68	cloudy	maulap
69	dark	madilím
70	dim	malamlám, malabò
71	dismal	mapanglâw
72	obscure	makulimlím
73	colorful	makulay
74	color	kulay
75	red	pulá
76	orange	pulâw ( <i>puláng dilâw</i> ), kahél
77	brown	kayumanggí
78	yellow	dilâw
79	green	lunfí
80	blue	bughâw

<b>81</b>	indigo .....	índigó
<b>82</b>	violet .....	ubi
<b>83</b>	purple .....	lila
<b>84</b>	pink .....	rosas
<b>85</b>	gray .....	ábuhin
<b>86</b>	pale .....	maputlâ
<b>87</b>	white .....	putî
<b>88</b>	black .....	itím
<b>89</b>	reddish .....	malápulá
<b>90</b>	orange tint .....	malápuláw, malákahél
<b>91</b>	brownish .....	malákayumanggí
<b>92</b>	greenish .....	maláluntî
<b>93</b>	bluish .....	malábugháw
<b>94</b>	indigo tint .....	maláíndigó
<b>95</b>	violet tint .....	maláubi
<b>96</b>	purplish .....	malálila
<b>97</b>	grayish .....	maláábuhin
<b>98</b>	whitish .....	maláputî
<b>99</b>	blackish .....	maláitím
<b>100</b>	pale color, pastel shade .....	maputláng kulay
<b>101</b>	light color .....	mapusyáw na kulay
<b>102</b>	dark color .....	matindíng kulay
<b>103</b>	bright color .....	matingkád na kulay

## BATHÁLAAN

(Theology)

1	theology .....	bathálaan
2	systematic theology .....	maáyusing bathálaan
3	practical theology .....	panggámiting bathálaan
4	historical theology .....	masaysaying bathálaan
5	theologian .....	dalúb-bathalà
6	theologize .....	bathalanín
7	theological .....	bathalanin
8	theosophy .....	bathárunungan ( <i>bathalà + karunungan</i> )
9	theosophist .....	bathárunong ( <i>bathalà + dunong</i> )
10	religion .....	ágamahan (Mar.), relihiyon
11	socioreligious .....	ulnuágamahin
12	deity .....	anito, diyús-diyusan
13	god .....	bathalà, diyós
14	goddess .....	bathaluman, diyosa
15	God, Elohim .....	Bathalà, Diyós
16	Savior, Redeemer, Messiah .....	Mánunubos
17	Lord, Adonai .....	Pangínoon
18	Christ, Kristos .....	Kristo
19	Creator .....	Maykapál
20	Christian .....	Makákristo, Kristiyano, Binyagan
21	Non-Christian .....	Dímakákristo, dí-Kristiyano, Díbinyagan
22	Christianity .....	Kakrístuhan, Pagkámakákristo, Pagkábinyagan
23	Christianize .....	Samakákristuhin
24	baptize .....	binyagán, kristiyanuhin
25	Christianization .....	Samakákristo, Pagsásakristiyano
26	Vatican Council .....	Sangguniáng Batikano
27	Vatican City .....	Lunsód Batikano
28	trinity .....	tatluhan, trinidad
29	priest .....	parì
30	minister .....	kataluna, minístro
31	tenet .....	turò
32	faith .....	pananámpalataya
33	belief .....	paniniwalà
34	doctrine .....	aral, doktrina
35	preaching (n.) .....	pangaral
36	preach .....	mangaral
37	preacher .....	mángangaral, tagápangaral

38	creed, credo .....	kapaniwalaán
39	religious deed .....	ágamahang kapaniwalaán
40	taboo .....	kabawalán, tabú
41	church .....	simbahan
42	go to church .....	magsimbá
43	worship (n.) .....	pananambá
44	worship (v.) .....	sumambá
45	place of worship .....	sambahan
46	mass (theo.) .....	misa
47	hear mass .....	makiníg ng misa
48	liturgy .....	palásambahan, palámisahan
49	churchgoing .....	paninimbá
50	churchgoer .....	máninimbá
51	pray (silently, solemnly without prepared text)	manalángin, dumalángin
52	pray (often chanted, with prepared text) ....	magdasál, dasalín
53	prayer (often improvised) .....	dalángin, panalángin
54	prayer (chanted, prepared) .....	dasál
55	recite a prayer .....	usalín
56	object of solemn prayer .....	dálanginán
57	alter .....	dambanà
58	rosary .....	rosaryo
59	praying accessory .....	dásalan
60	kneeling place .....	lúhuran
61	follower .....	tagásunód
62	disciple .....	disípuló
63	apostle .....	alagád
64	apostolic .....	álagarín
65	Apostolic Age .....	Álagaríng Kapanáhun
66	ecumenical .....	malúkubin
67	Ecumenical Council .....	Sangguniáng Malúkubin
68	ecumenism .....	pagkámalúkubin
69	ecumenical doctrine .....	malúkubing aral
70	divine .....	binathalà
71	divinity (1) .....	pagkábinathalà
72	divinity (2) (lesser god) .....	bathá-bathálan
73	divinity (3) (study of diving things) .....	palábathálan
74	deity .....	bathalain, diyusín
75	sacrament .....	galimbanál ( <i>gali na banál</i> ), sakramento
76	holy .....	banál
77	holiness .....	kabánalan
78	sacred .....	pamathalà, pandiyós
79	sacrosanct .....	kábanál-banalan
80	saint .....	santó

<b>81</b>	spirit (1) .....	diwa
<b>82</b>	spirit (2) .....	batlaya
<b>83</b>	spiritual .....	makádiwa
<b>84</b>	spiritualism .....	pagkámakádiwa, diwakuro
<b>85</b>	spiritism .....	pagkámakábatlaya, batlayakuro
<b>86</b>	spirist .....	makábatlaya
<b>87</b>	medium .....	talaytayan
<b>88</b>	sin .....	sala, kasalanan
<b>89</b>	original sin .....	pamuláng sala, unang sala
<b>90</b>	sinner .....	makásalanan
<b>91</b>	confession .....	kumpisal, págtatapát
<b>92</b>	to confess .....	mangumpisal, magtapát
<b>93</b>	confessional .....	kumpisalan
<b>94</b>	scriptures .....	mgá kasulatán
<b>95</b>	Holy Scriptures .....	Mgá Banál na Kasulatan
<b>96</b>	Bible .....	Bibliyá
<b>97</b>	biblical .....	bibliyahin
<b>98</b>	biblical story .....	bibliyahing kuwento
<b>99</b>	biblical research .....	bibliyahing pánanaliksík
<b>100</b>	hermeneutics .....	paláliwatang-Bibliyá
<b>101</b>	scroll .....	balumbón
<b>102</b>	Dead Sea Scrolls .....	Mgá Balumbón ng Dagat-Patáy
<b>103</b>	revelation .....	siwalat, kasiwalatan
<b>104</b>	apocalypse .....	huwalat ( <i>hulang siwalat</i> )
<b>105</b>	prediction .....	hulaysay ( <i>hula + salaysay</i> )
<b>106</b>	gospel .....	laygáy (Bis.), ebánghelyo
<b>107</b>	Gospel Truth .....	Katutohanang Ebánghelyo, Katutohanang Laygáy
<b>108</b>	Pentateuch .....	Limaklát
<b>109</b>	Genesis .....	Samulâ
<b>110</b>	Exodus .....	Pagluwás
<b>111</b>	Leviticus .....	Találibithán
<b>112</b>	Numbers .....	Mgá Bilang
<b>113</b>	Deuteronomy .....	Kaduhámbatás
<b>114</b>	Old Testament .....	Lumang Tipán
<b>115</b>	New Testament .....	Bagong Tipán
<b>116</b>	Before Christ (B.C.) .....	Bago kay Kristo (B.K.)
<b>117</b>	Anno Domini (A.D.) .....	Mulâ kay Kristo (M.K.)

# TALÁSANGGUNIÁN

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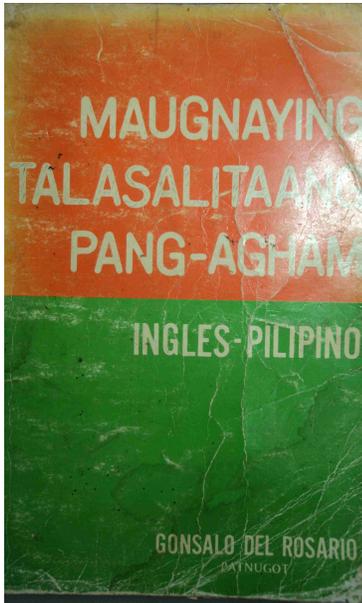
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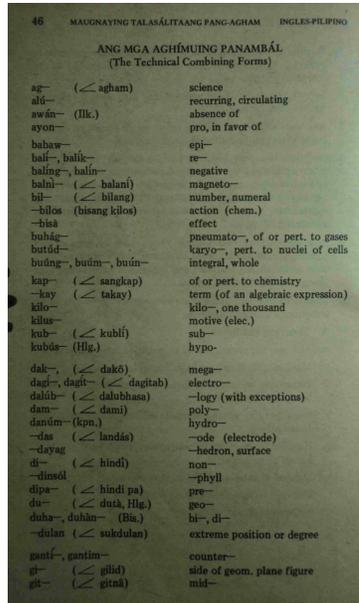
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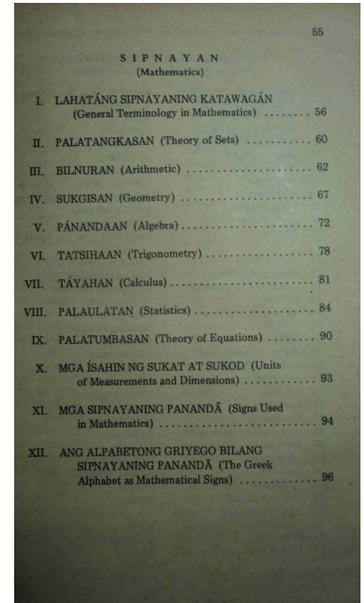
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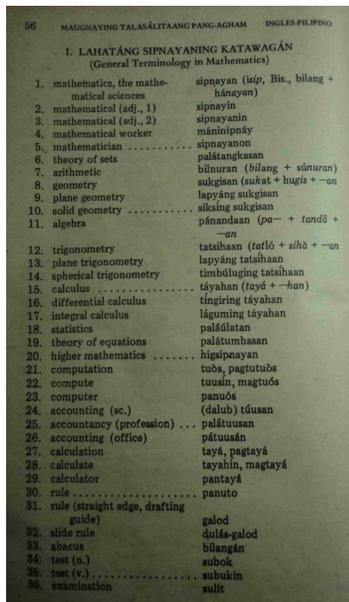
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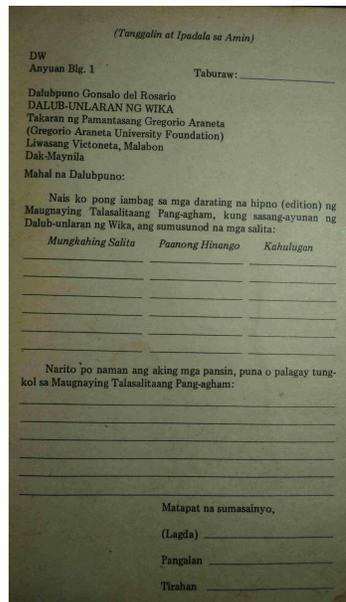
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Ang mgá laraw at larawang ginamit ay pagmamay-ari ng kanyá-kanyáng may-akdá.  
Waláng paglabóg sa karapatáng-ari ang sadyá.  
Para sa páturúang-laán lamang.  
Hindi ipinagbibili at hindi nararapat ipagbili.